REPORT RESUMES

ED 011 810 RE 000 039

LINGUISTICS IN READING INSTRUCTION.
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MISSISSIPPI UNIV., UNIVERSITY, SCH. OF EDUC.
PUB DATE FEB 65
EDRS PRICE MF-$0.27 HC-$6.24 156P.

DESCRIPTORS- *LINGUISTICS, *READING INSTRUCTION, *LANGUAGE PATTERNS, *DIALECTS, *TEACHING TECHNIQUES, MORPHOLOGY, GRAPHEMES, PHONETICS, PHONICS, SYNTAX, GRAMMAR, CULTURAL INFLUENCES, SOCIAL INFLUENCES, LANGUAGE ARTS, SPELLING, UNIVERSITY

PRACTICAL SUGGESTIONS FOR THE CLASSROOM TEACHER OF READING ARE REPORTED BY PARTICIPANTS OF AN INSTITUTE ON THE APPLICATION OF LINGUISTICS TO SPELLING AND READING INSTRUCTION. CHAPTER 1, "PHONEMICS AND ORTHOGRAPHY IN READING INSTRUCTION," TRACES SIGNIFICANT RELATIONSHIPS AMONG PHONEMICS, PHONETICS, PHONICS, ORTHOGRAPHY, AND READING INSTRUCTION. CHAPTER 2, "MORPHOLOGY IN READING INSTRUCTION," IS CONCERNED WITH STRUCTURAL ANALYSIS. CHAPTER 3, "SYNTAX IN READING INSTRUCTION," IS CONCERNED WITH LANGUAGE UNITS MORE COMPLEX THAN THE SINGLE WORD, AND THEIR RELATIONSHIPS WITH READING INSTRUCTION. CHAPTER 4, "DIALECTOLOGY IN READING INSTRUCTION," DEALS WITH PROBLEMS ARISING FROM THE FACT THAT LANGUAGE PATTERNS VARY FROM AREA TO AREA AND FROM CULTURAL LEVEL TO CULTURAL LEVEL. COMPLICATED TERMINOLOGY IS SIMPLIFIED FOR THE CREATIVE TEACHER SEEKING TO DEVELOP THE CHILD'S BACKGROUND IN BASIC LANGUAGE PATTERNS IN HIS ORAL LANGUAGE IN ORDER TO FACILITATE HIS BEGINNING READING DEVELOPMENT. EMPHASIS IS PLACED UPON HELPING THE CHILD FEEL COMFORTABLE WITH THE LANGUAGE HE BRINGS TO SCHOOL, AS WELL AS UPON DEVISING MEANS OF DEVELOPING LANGUAGE UNDERSTANDINGS AND APPRECIATIONS TO FIT THE CLASSROOM SITUATION. IMPLICATIONS FOR AND RECOMMENDATIONS TO THE CLASSROOM TEACHER ARE DISCUSSED. FIGURES, CHARTS, TABLES, AND A BIBLIOGRAPHY OF 47 ENTRIES ARE INCLUDED.

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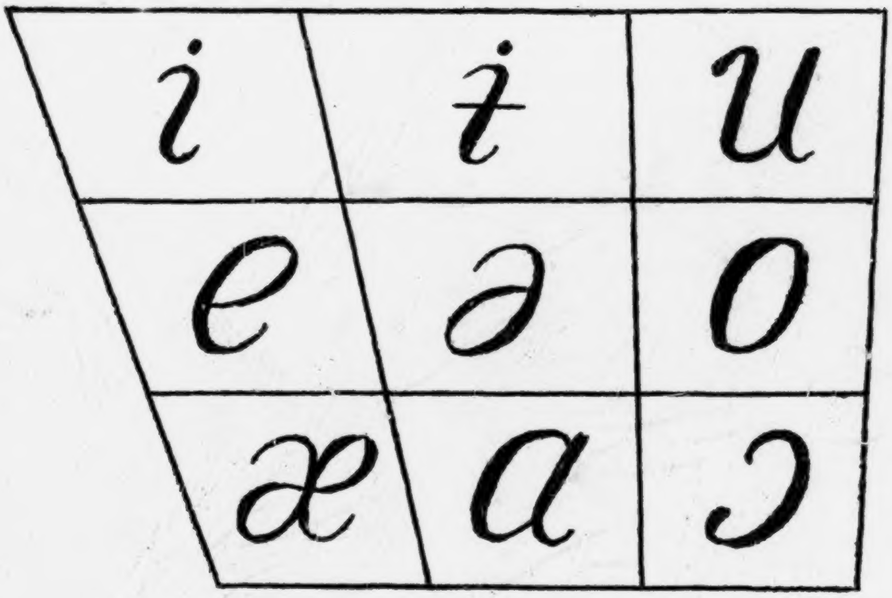
Linguistics in Reading Instruction



Report of a Summer, 1965
N. D. E. A. Reading Institute
The University of Mississippi

E000 039

The program reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education, under the provision of Title XI, Public Law 85-864, as amended.

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LINGUISTICS IN READING INSTRUCTION

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NDEA Institute in Reading Instruction sponsored by
The U.S. Office of Education and The School of Education
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Second Printing February, 1966

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PREFACE

During the spring of 1965, a contract was executed between the United States Office of Education and the University of Mississippi providing for an NDEA institute, Linguistics in Reading Instruction, to be held at the university in the summer of 1965. This report is a direct outgrowth of that institute.

Unique in that it was the first NDEA institute to be aimed directly and exclusively at relating linguistics to reading instruction, the University of Mississippi institute was organized around three basic courses: (1) Introduction to Linguistics, (2) Problems, Issues and Trends in Reading Instruction, (3) Linguistics in Reading Instruction. The first two courses each met for a two hour period every day during the first six weeks of the institute. The third course, Linguistics in Reading Instruction, met as a workshop four hours every day during the last two weeks of the institute. It was during this latter period that the present report was written.

Early in our work, the staff and institute participants agreed that our chosen task of applying linguistics to reading instruction would not be an easy one. We agreed further that a written report seemed the most logical medium for organizing our work.

First of all, we wrote this report for ourselves. As practicing elementary school teachers, principals, and reading supervisors, we wanted something concrete that we could take back with us to our respective jobs to make us more effective in those jobs. This, we believe, we have accomplished. We are quite aware that this report can never be as meaningful to others as it is to those who shared the many experiences which produced it. What we wrote out of the report may be as helpful to us as what we wrote into it.

We accept, however, full responsibility for the report. We worked hard at developing it, and we are willing to share it freely with anyone who joins in our desire to open avenues between reading instruction and linguistics.

From a grammatical point of view, the word linguistics is a singular noun; therefore, it properly takes a singular verb. We say, "linguistics is," not "linguistics are." Phonetics, phonemics, morphology, dialectology, and linguistic geography are but a representative few of the many individual branches which, collectively, go to make up the broad discipline of linguistics.

For this reason, it is illogical and misleading to speak of the linguistic approach to reading instruction or the role of linguistics in reading. We are convinced that linguistics has much to offer the reading teacher; we are equally convinced that she will never find this assistance bound up in a neat package labeled, The Linguistic Approach to Reading. Rather, she will find the broad field of linguistic science is a veritable treasure vault of potential aid for the teacher of reading. Like those in a true treasure vault, however, the riches of linguistics become available to the teacher only as she is willing and able to force open the doors which guard them. We hope this paper may serve as one tool to assist in broaching the treasure doors.

In keeping with our convictions concerning the multi-faceted promise of linguistics, we have organized the report proper into four chapters:

Chapter I, "Phonemics and Orthography in Reading Instruction," attempts to trace out significant relationships among phonemics, phonetics, phonics, orthography, and reading instruction.

Chapter II, "Morphology in Reading Instruction," is concerned with what the reading teacher will recognize as structural analysis. We hope, however, that our treatment goes beyond the rather superficial discussion afforded this topic in the typical chapter on word attack skills.

Chapter III, "Syntax in Reading Instruction," is concerned with language units more complex than the single word and their relationships with reading instruction. If reading is truly "active, selective thinking," the reading teacher must direct her attention to the organizational framework which man has evolved for his communication system.

Chapter IV, "Dialectology in Reading Instruction," comes to grips with problems arising from the fact that language patterns vary from area to area and from cultural level to cultural level. In strict truth, each of us speaks his own dialect (idiolect). The general problem is complicated even further because written language patterns vary less than do spoken language patterns. Car, him, and grease are spelled the same everywhere; but their oral counterparts differ widely according to geographic distribution. Consider the bewilderment of children through the South who pronounce the word hen to rhyme with sin, when they find hen cited in their basal readers as an example illustrating the short e vowel sound.

In developing this report, we have sought and received assistance from many sources. Dr. Sumner Ives, Professor of Linguistics, Syracuse University, joined our institute for a period of two days as a lecturer and consultant. In addition to many general ideas, we are specifically indebted to him for permission to reproduce a portion of one of his unpublished charts as our Table I in Chapter I.

Dr. W. R. Van Riper, Professor of English, Louisiana State University, also spent two days with us. He delivered three lectures on dialectology and gave us many of the ideas found in Chapter IV.

Dr. James Califf, Associate Professor of Education, Mississippi State College for Women, is due special thanks. Although we were not fortunate enough to have his assistance during that portion of our institute which saw the actual development of this report, he taught a course in reading instruction during the first six weeks of the institute. His wholesome influence is reflected throughout the entire report.

Although we consulted hundreds of books and journal articles during the course of our work, three of them merit special mention here: (1) Charles Carpenter Fries, The Structure of English. New York: Harcourt, Brace and Company, 1952. (2) Carl A. Lefevre, Linguistics and the Teaching of Reading. New York: McGraw-Hill Book Company, 1964. (3) George D. Spache, Reading in the Elementary School. Boston: Allyn and Bacon, Inc., 1964. These books were used as primary texts for the formally organized courses of the institute.

University, Mississippi
August, 1965

J. R. R.
E. C.
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CHAPTER I

PHONEMICS AND ORTHOGRAPHY IN READING INSTRUCTION

Juliet P. Borden, Charline P. Herndon, Alma M. McCullough,
Grace King Osbeck, Lunetta J. Roberts

INTRODUCTION

With few exceptions, Americans can communicate with each other. This is possible because Americans speak essentially the same language. One may give the language his own twist of the tongue to reflect his personality or thinking, but the language remains essentially the same. One reads the printed page and some meaning is evolved because the language read is essentially the same as the language spoken.

To speak well or to read well, therefore, involves a basic understanding of this language. Those who have analyzed and studied language, linguists, have given teachers the necessary informational background for this basic understanding.

Linguists have used an understanding of matter as framework for the understanding of linguistics, the science of the study of language. For the purposes of this discussion, the atom will be thought of as the smallest unit of matter. Certain combinations of atoms produce molecules. Molecules join to form specific kinds of matter. The kinds of matter can then be combined to serve numerous and various purposes in a society.

The atoms of the language are the phonemes. These are the smallest sound units in the language. Certain combinations of phonemes make words or morphemes. Morphemes are the molecules of the language and are the smallest units of language that can bear meaning. Morphemes are structured into sentences to produce language which may be read or spoken. The study of this structuring of sentences is syntax.

Although the basic units of speech are phonemes, they have no existence outside of morphemes (roots, prefixes, suffixes). Morphemes are the minimum meaning-bearing units, but they have no existence outside of the sentence, or syntactical, structures. Syntactical structures have reality only in the total stream of language.[1]

The phoneme is the unit of sound. The written phoneme is a grapheme. The writing of the grapheme (a letter or group of letters) in proper order to form morphemes is orthography (spelling).

The purpose of this first chapter of this book is to discuss phonemics and orthography.

DEFINITION AND DISCUSSION OF TERMS

Phonemics

Phonemics, a science which is younger than phonetics, describes and classifies the sounds of a specific language, according to the way those sounds are actually spoken and heard, as the same sound or as separate sounds.

---

[1] Kenneth S. Goodman, "The Linguistics of Reading," The Elementary School Journal, LXIV (April, 1964), 360.

The phoneme is accepted by its speakers as a single sound unit, but, under more exact analysis, each phoneme is found to be a group or class of related sounds.

Many linguists agree that the English language has forty-six elemental speech sounds, or phonemes, each of which may be one of three kinds: consonant, vowel, and accompanying phonemes of intonation. Except for intonation phonemes, each of these phonemes is represented in writing by one or more graphemes. The phoneme sounded *th*, in *their*, is written with a grapheme of two letters. Another phoneme, *eigh*, sounded (ā) in *eight*, is written with a grapheme of four letters. Another phoneme *e*, sounded (ĕ) as in *pet*, is written with one letter. Sometimes a single grapheme (letter or group of letters) may represent more than one phoneme. The grapheme *a*, in *cat*, represents one phoneme while the grapheme *a*, in *cake*, represents a different phoneme.

The objective test for phonemes is a contrast, or difference in meaning, which appears when one sound is substituted for the other in otherwise identical words. The grapheme *p*, when written as a phoneme, becomes /p/, the slants designating that the reader is considering the sound made by the grapheme *p*. The use of /p/ in the environment of _it gives the word, *pit*, meaning. The word, *kit* changes *pit* to a different word, *kit*, when /k/ is substituted for /p/. /p/ and /k/ are two different phonemes, so far as English is concerned, because they contrast in the same environment. *Pit* and *kit* are a minimal pair. A pair of utterances in which one utterance is different from the other by only one phoneme is called a minimal pair.

Stress, one of the intonation phonemes, changes the meaning in the two utterances pérmit (noun) and permít (verb). They, too, are a minimal pair as they differ by only one phoneme.

As mentioned above, a phoneme is a group of sounds. The phoneme /p/ may be sounded in many ways, each of which is called an allophone. The /p/, as sounded in *pit*, *spit*, and *sip*, exhibits three separate and distinct sounds or allophones (literally, "other sounds," or more precisely sounds occurring in other places or other environments) even though they are closely related. The aspirated or strongly uttered *p* of *pit*, followed by a perceptible puff of breath comes at the beginning of a word. The unaspirated *p* of *spit* with a much gentler release of breath occurs only after initial *s*. The sound of *p* occurring at the end of a word as in *sip* is an unreleased or imploded *p*, for which the lips are not opened and the sound is not released with an explosion of breath. Because they occur in their own particular word positions or environments they are said to occur in mutually exclusive environments.[2] Another kind of phoneme,

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[2] Because such sounds or allophones of one phoneme occur in mutually exclusive environments, they are said to be in complementary distribution. The aspirated *p* of *pit* may at times occur in final position, but when it does, the meaning of the word is not changed; so this occurrence of aspirated *p* is said to be in non-functional variation with unreleased *p*.

the supra-segmental phoneme, will be discussed later in this chapter.

Phonetics

Phonetics is the scientific study of the production and perception of speech sounds. Phonetics is a science in its own right and deals with speech sounds in general. The action of the larynx, tongue, and lips in sound production is pertinent in phonetics.

In using phonetics, the linguist takes the phonemes used by speakers of a language and describes the role of the organs of the vocal tract which play a part in their production.

Phonetics has two major branches, articulatory phonetics which deals primarily with the production of speech sounds, and acoustic phonetics which deals with the perception of speech sounds.

Phonetic symbols are used to represent how a sound is produced. Letters of the traditional alphabet and other symbols are used as phonetic symbols. Phonetic symbols are always enclosed in brackets [ ].

The phoneme /p/, when transcribed or written phonetically to show production of that sound unit, is written [p]. The aspirated or strongly exploded pronunciation is written [p']. The unaspirated or gentler explosion of sound is written [p]. The unreleased, or imploded, consonant is written [p-]. The diacritic marks ['] and [-] give more precise information about the production of the sound.[3]

Relationship of Phonemics to Phonetics

A major difference between phonemics and phonetics is that a phonemic change is accompanied by a meaning change; whereas, phonetics is concerned with sound changes even when there is no change in the meaning of the words in which they appear.

> Here is the essential difference between phonemic and phonetic analysis: phonemic analysis, simpler and more functional than phonetic, deals only with sounds significant in the language system and ignores nonsignificant differences.[4]

Phonetics describes speech sounds in much greater detail than is needed by the elementary reading teacher. An understanding of phonemics provides the teacher with sufficient linguistic background for her reading instruction. Cynthia D. Buchanan has written A Programmed Introduction to Linguistics, D. C. Heath and Company, Boston, 1965, which gives the teacher an opportunity to explore, on her own, phonemics in sufficient depth. There are other sources listed in the bibliography. Many colleges and universities are beginning to offer linguistic courses for teachers.

Phonics

Phonics is a term that has come to mean different things to different people. Albert J. Harris believes that "phonics is the study of speech equivalents of printed symbols and their use in pronouncing printed words; it is therefore part of phonetics."[5] Smith and Dechant interpret this definition as suggesting that the association of the appearance of the letter or letter-combinations with a particular sound is the essential element in learning phonics.[6]

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[3] Refer to Phonemics to review the illustration of allophones.

[4] Carl A. Lefevre, Linguistics and the Teaching of Reading (New York: McGraw-Hill Book Company, 1962), p. 169.

Classroom teachers sometimes loosely use the terms phonics and phonetics interchangeably, a practice that is not consistent with linguistic usage.

Many teachers confine the use of phonics largely to a description of the relationship of sounds to spelling--a good practice, but not its only possible function in teaching procedures.

The sound as actually spoken and thought is phonemic; the field is phonemics. Descriptions as to how this sound is produced are phonetic; the field is phonetics. The sound as represented in writing is graphic; the field is orthography. What the spelling in writing or print tells one to say is phonic; the field is phonics.

Therefore, even though phonics is related to phonetics (they both have the same base, the field of phonemics, and they both are concerned with oral speech sounds), in usage phonics is directly related to phonemics. Phonics is concerned with the sound produced when one is relating the sound to reading or spelling (orthography).

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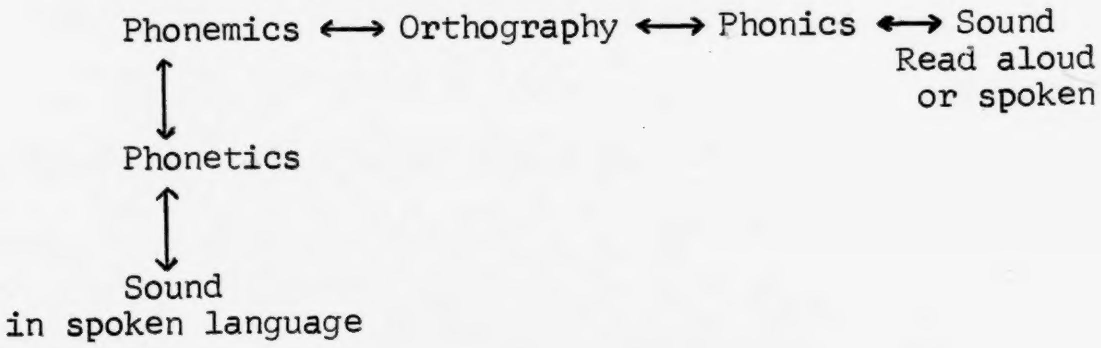
[5] Albert J. Harris, How to Increase Reading Ability (3rd ed.; New York: Longmans, Green, and Company, 1959), p. 324.

[6] Henry P. Smith and Emerald V. Dechant, Psychology in Teaching Reading (New Jersey: Prentice-Hall, Inc., 1961), p. 194.

The diagram below represents this interpretation.



Phonics, even as revised by linguists, is not the linguistic approach. It is only one technique in the total linguistic approach to reading. It should be used simultaneously with morphemics, syntax, and dialectology as suggested in succeeding chapters.

PHONEMICS AS RELATED TO THE TEACHING OF READING

Phoneme Charts

Teachers need a general knowledge of speech sounds and an understanding of how these sounds are correctly formed to be most effective in phonics instruction. It is not possible to give a detailed description of such information in this paper. It is hoped that the following charts and figures, in addition to the knowledge the teacher acquires from actually making the sounds, will be sufficient.

In Chart I, a list of the English phonemes which are frequently spelled by graphemes of more than one letter are presented on one page for the convenience of the reader. The list of consonants in the left column is fairly exhaustive since the spelling rules for consonants are relatively simple. In the right column is a list of the English vowels (cf. Figures 1-3) and semi-consonant glides (cf. Chart V). Since the orthography of these complex sounds is itself so complex, no attempt has been made to indicate it on this chart. Charts II through V list all of the English consonant phonemes and indicate for each its most common graphemes, the symbol used for it in phonemic transcription, and a description of its most usual articulation. Chart II lists the stops, Chart III the resonants, Chart IV the fricatives, and Chart V the affricates and glides.

The articulation and phonemic symbols of the simple vowels corresponding to the traditional short vowels are given in Figures 1-3.

CHART I

ILLUSTRATIVE PHONEMIC-ORTHOGRAPHIC PROBLEMS

Two-Letter Graphemes for Single Consonants (Traditional Term, Consonant Digraph)

Grapheme	Phoneme	Example	Transcription
ck	/k/	duck	/dək/
ch tch	/č/	church	/čərč/
ti	/š/	nation	/neyšəh/
sh	/š/	ship	/šip/
ge	/ž/	garage	/gəraž/*
ph	/f/	phone	/fown/
dge	/ǰ/	judge	/ǰəǰ/
gh	/f/	cough	/kawf/
ng	/ŋ/	sing	/siŋ/
wh	/h/	who	/huw/**
th	/θ/	thin	/θin/
th	/ð/	then	/ðen/

Examples of Complex Vowel Nuclei (Traditional Terms, Long Vowels and Dipthongs)

Vowel, Dipthong	Phonemic Analysis	Example	Transcription
(ē)	/iy/	bead	/biyd/
(ā)	/ey/	make	/meyk/
(ī)	/ay/	lie	/lay/
(ō)	/ow/	oak	/owk/
(ū)	/uw/	neuter	/nuwtər/
(oi)	/oy/	boil	/boyl/
		boy	/boy/
(ou)	/aw/	fowl	/fawl/
		house	/haws/

*In some dialects the transcription will read /g raj/.

**Note that usually, in many dialects, /h/ represents a genuine consonant blend as in when /hwen/.

CHART II

ENGLISH PHONEMES

STOPS*							
Grapheme	Phoneme	Example	Voiced	Grapheme	Phoneme	Example	Voiceless
d	/d/	Dad	Press the tongue tip against the upper teeth ridge. Blow down the tongue and start the voice at the same time. Say: dad**	t	/t/	tot	The sound of /t/ is started exactly like its twin /d/. Blow the tongue so quickly that the breath escapes with a kind of explosion which is voiceless. Say: tot**
b	/b/	bib	Close the lips lightly. Hold the teeth slightly apart. Blow the lips apart with a voiced breath. Say: bib**	p	/p/	pop	Make the sound exactly as the /b/ is made except you do not use your voice. Say: tot**
g	/g/	gag	Slightly part the lips and teeth. Raise the back of the tongue against the back roof of the mouth. Keep the tip of the tongue behind the lower front teeth. Blow the tongue down suddenly with a voiced breath. Say: gag**	c,k	/k/	cook	Make the sound exactly as /g/ is made except the slight explosion is voiceless. Say: cook**

*Speech sounds which are made by stopping or interrupting the breath behind a complete closure, then releasing sharply.

**If this word is not in student's vocabulary, substitute one that is appropriate.

CHART III

ENGLISH PHONEMES

NASAL RESONANTS*
(Normally Voiced)

Grapheme	Phoneme	Example	
n	/n/	Nan	Hold the tongue against the upper teeth and voice the sound as the breath stream goes through the nose. Do not drop the tongue or close the mouth until you have stopped making the sound: Nan
m	/m/	mom	Close the lips lightly with the teeth slightly apart. Send a humming sound through the nose. A vibration may be felt by touching the nose. Say: mom
ng	/ /	sing	Raise the back of the tongue against the back roof of the mouth as in the position for /k/ or /g/. Keep the tongue in position as a voiced sound is sent through the nose. Drop the tongue gently at the end of the sound. Say: sing.

MEDIAN RESONANT

r	/r/	red	Place the back sides of the tongue up against the teeth, move the tip of the tongue toward the teeth-ridge and form a curl down the middle of the tongue. Say the word: red

LATERAL RESONANT

l ll	/l/	lull	Raise the tip of the tongue to touch the upper teeth ridge. Flatten the rest of the tongue so that the underside of it fits the shape of your front teeth, which causes the breath to stream from the upper sides of the tongue. Say: lull

---

*Sounds that depend upon the properties of the resonance chamber and are produced without audible friction. The breath stream escapes with interruption.

CHART IV

ENGLISH PHONEMES

FRICATIVES*

Grapheme	Phoneme	Example	Voiced	Grapheme	Phoneme	Example	Voiceless
v	/v/	valve	Place the upper teeth lightly on the lower lip. Force out breath as the teeth and lip touch using the voice. Say: valve	f,ff	/f/	fluffy	The sound of /f/ is made exactly like its voiced twin /v/ except the sound is breath without voice. Say: fluffy
th	/ð/	then	Place the tip of the tongue lightly against the upper front teeth with teeth and lips slightly apart. Force out the breath using voice. Say: then	th	/θ/	thin	This sound is made exactly like the sound of / / except the breath is forced out in a steady stream and is not voiced. Say: thin
z, s	/z/	zeroes	Hold the lips in a slightly open lateral position. Press the grooved tip of the tongue against the upper teeth. Send a voiced breath in a narrow stream along the groove. The breath escapes with a hissing and voiced sound between the tongue and front teeth. Say: zeroes	s,ss	/s/	sass	This sound is made exactly like the sound of /z/ except that no voice is used when the breath escapes with a hissing sound between the front teeth. Say: sass
s	/z/	treasure	Round the lips. Use the same tongue and teeth position as for /z/ and /s/. Use the voice as the breath is sent in a steady stream along the groove and out between the tongue and front teeth. Say: treasure	sh	/s/	shut	This sound is made exactly like the sound of /z/ except that no voice is used. Say: shut

---

*Speech sounds in which the breath stream is not stopped but continues to flow forced through a narrow passage.

CHART V

ENGLISH PHONEMES

AFFRICATES*

Grapheme	Phoneme	Example	Voiced	Grapheme	Phoneme	Example	Voiceless
j,g	/ǰ/	jump giant	Raise the front part of the tongue toward the teeth-ridge and hard palate. Say: jump	ch	/č/	church	This sound is made the same as the j sound except the breath is used. Say: church

SEMI-CONSONANT GLIDE**

w	/w/	wet	Make a circle of the lips. With the tip of the tongue raised back of the lower teeth, blow the stream without voice through the opening in a continuous stream. The /w/ glides into the following vowel sound. Say: wet
y	/y/	yet	The front tip of the tongue is raised nearly to the hard palate behind the upper teeth. With the side of the tongue touching the sides of the teeth, the teeth and lips are slightly apart. Voiced breath passes through the narrow opening. Say: yet
h	/h/	horse	The sound of /h/ is made only with the breath. The vocal cords are brought near enough together to cause friction but no voice. The lips are relaxed and open. The tongue is behind the lower teeth. Blow a quick breath. Say: horse

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*Speech sounds which combine the characteristics of both stops and fricatives. The breath stream is first stopped then slowly released through a narrow opening.

**A special class of consonants that also have vowel characteristics.

The simple vowel phonemes of American English lend themselves to a symmetrical arrangement according to the position of the tongue within the oral passage during the articulation of each vowel sound. Vowels may be designated front, central, and back, as well as high, mid, and low; both sets of terms are used to designate the simple vowel sounds. For example /i/ is high front vowel; /a/ a low central vowel; and /o/ is a mid back vowel.

Figures 1, 2, and 3 show relative tongue positions for the front, central, and back vowels, respectively, with a curving line at each of the high, mid, and low positions.[7] Each curve represents the top, or profile, of the tongue in each position, nine positions all told. Such curves may be called tongue lines.

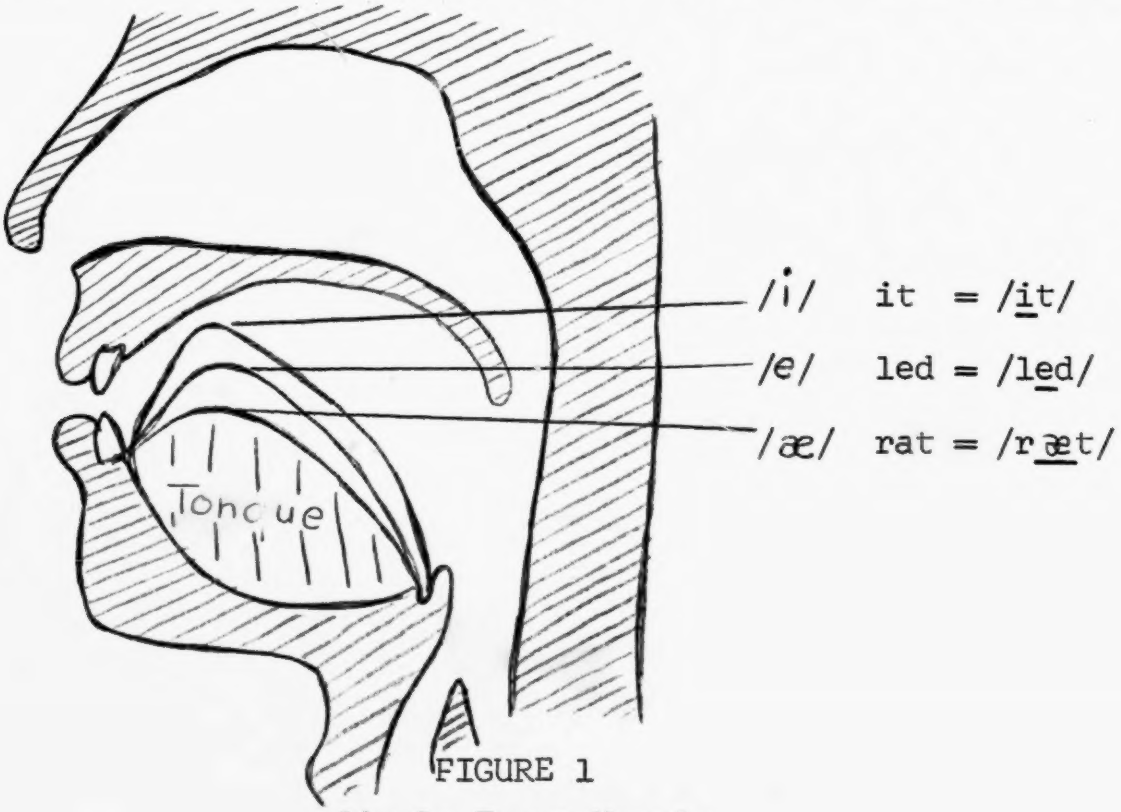

FIGURE 1

Simple Front Vowels

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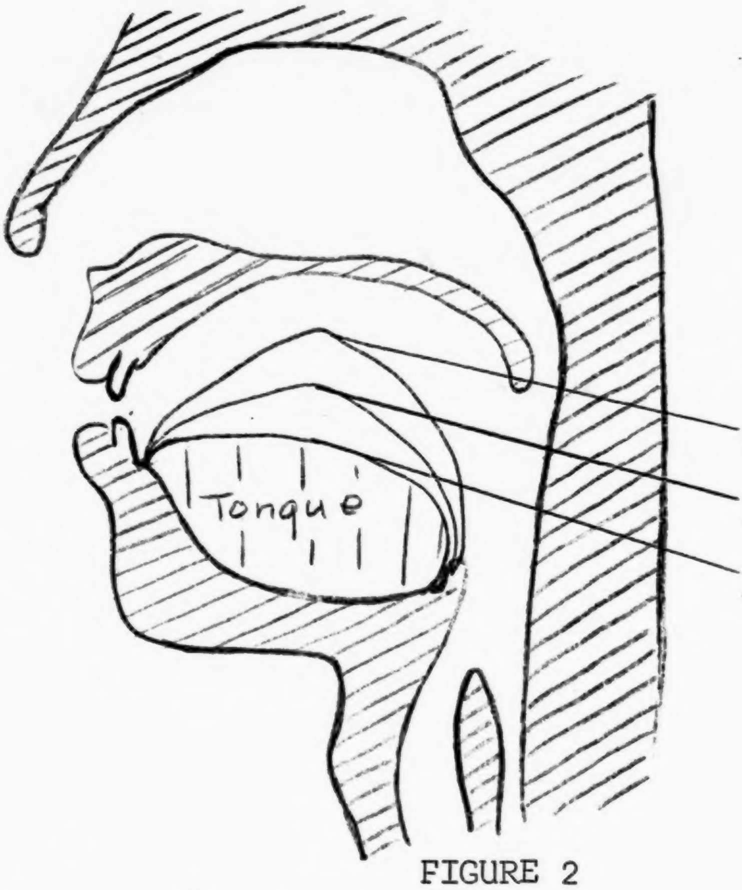
[7] Carl A. Lefevre, *Linguistics and the Teaching of Reading* (New York: McGraw-Hill Book Company, 1962), pp. 221-222. The figures show only traditional short vowel sounds. Long vowel sounds are shown on Chart V.



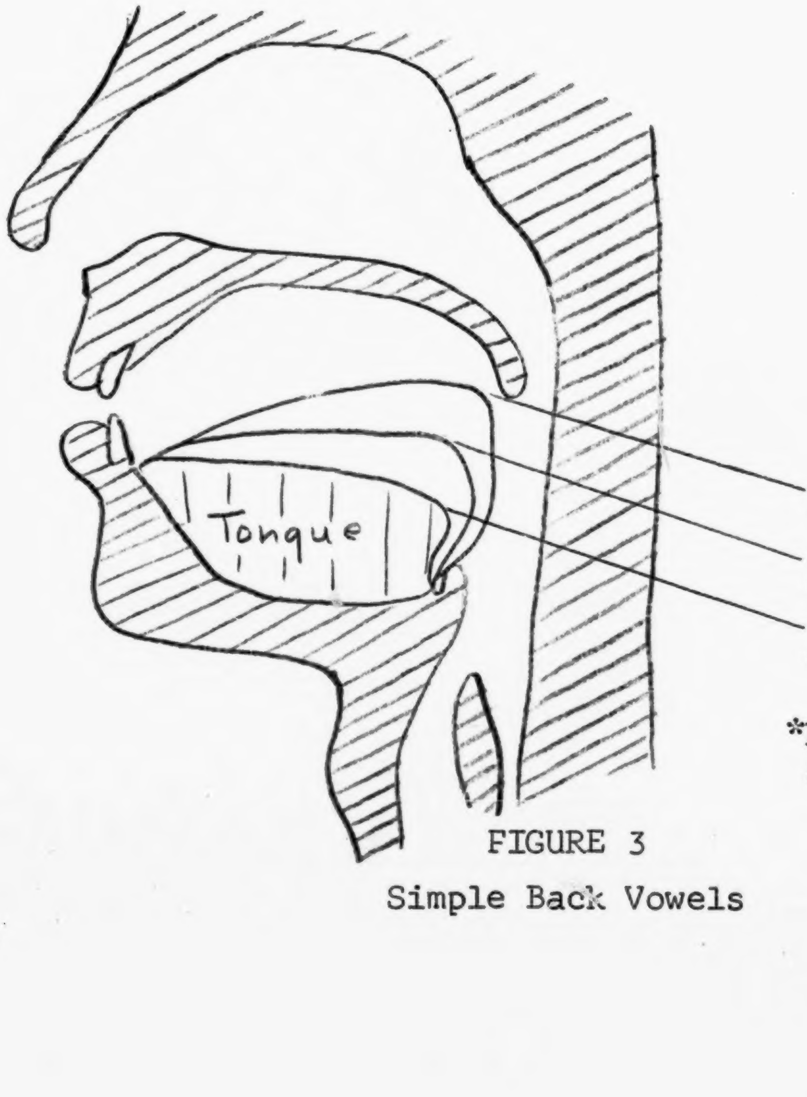
/ɨ/ hunted = /həntɨd/

/ə/ hut = /hət/

/ɑ/ cot = /kɑt/

FIGURE 2

Simple Central Vowels



/u/ pull = /pul/

/o/ nose = /nowz/*

/ɔ/ caught = /kɔht/*

*Rarely occurs as simple vowel

FIGURE 3

Simple Back Vowels

Each of these three drawings approximates three relative positions of the tongue in position to articulate three phonemes formed by successive lowered or raised positions of the tongue.

LINGUISTIC PRINCIPLES IN CURRENT TEACHING TECHNIQUES

This new knowledge about language, which linguists have discovered through modern scientific study, has forced us to abandon many older assumptions about language. Many of these discoveries will be of great value to the classroom teacher. This does not mean, however, that the classroom teacher should immediately discard all the present methods of teaching and rush to get on the "linguistic bandwagon" by accepting any new program merely because it is called "linguistic."

For example, linguists affirm that minimal pairs are two words that differ by only one phoneme such as *will-fill* and *find-mind*. Exercises in which new words are made from old words by changing one phoneme are found in many of the guidebooks that accompany reading programs. Exercises for distinguishing phonemic differences are also included in most programs. There may be dialectal differences, however, that would make it necessary for the teacher to adjust exercises of this type to fit the accepted dialect of the region. (Dialectology will be discussed in Chapter IV.) Another use of the phoneme which is already being taught in reading programs is the use of stress to change the meaning of words as in *ímport* and *impórt*, and the use of the phoneme change in morphemes like *read* /riyd/ as in *I can read* and read /red/ as in I have read the book. Recognition of the phonemic change in these words depends upon the context of the sentences.

Teachers are also aware of and use prefixes, suffixes, and change or addition of phonemes to base words in order to make new words, plurals, or possessives. A discussion of these techniques will be found in Chapter II on morphology.

ABUSE OF LINQUISTIC PRINCIPLES IN CURRENT TEACHING TECHNIQUES

An understanding of structural linguistics convinces one, however, that some present-day phonics practices are not only of questionable value in teaching reading but may actually be harmful to some children. Chief among these practices is the attempt to isolate sounds for drill and memorization of grapheme-phonic relationships. The sounds within a word are so fluid that it is extremely difficult to isolate one sound from another and retain the true single phoneme that each letter or letter-group represents. The same phoneme isolated from the word may sound entirely different when sounded in the word, because different allophones are used. This is not to say that words may not be taken apart, analyzed, and put back together again (synthesized). This is a procedure acceptable to both teachers and linguists and may be used to good advantage in contrasting phonemes, showing prefixes, suffixes, root words, and derivatives. This procedure may also be used to strengthen letter-word perception and grapheme-phonic relationship. It is the removal of the phoneme from its word environment for drill purposes that is objectionable. Practices that teach grapheme-phoneme relationships are to be encouraged.

Another present-day phonics practice that may be questioned is that of assigning vowel sounds to key words that differ in dialectical regions. A phonics book might assure the young student from one region that o in hot is sounded as o in hog, but when the student attempts to transfer the sound to his dialect he may become confused by the failure of the transfer to meet his dialectical demands. Or again, students in one section of the country may hear men, ten, tin, as rhyming words while students in another section will not hear these sounds as the same phoneme.

Richard Rystrom lists two additional criticisms of the phonics method.[8] The method falsely assumes that each letter has a sound. This, of course, is not true as letters have no sounds. They are arbitrary symbols which represent sounds. A single letter may represent several sounds. The letter g is pronounced differently in go, gem, gnat, and rough.

Mr. Rystrom's second objection is that phonics encourages students to study meaningless materials. The drill on unnatural isolation and fragmentation of sounds causes children to read letter by letter.

These current abuses of the phonic method have perhaps obscured the uses of phonics and may be the result of the lack of a basic understanding of structural linguistics by the classroom teacher. As teachers become more knowledgeable of language structure and more aware of the inseparable relationship of language and reading, the phonics method will take its rightful and effective place in the total reading instruction program: its rightful place because ". . . we must acknowledge that learning to read is a process of moving from written symbol to oral symbol to meaning"[9]; its effective place because phonics is one of the methods for teaching the conscious association between the written symbol and the oral symbol in the reading process.

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[8] Richard Rystrom, "Whole-word and Phonics Methods and Current Linguistic Findings," Elementary English, XLII (March, 1965), 266.

Another abuse of linguistic principles may develop when teachers give children a list of words and ask them to find the "little words" in the big words. Such a practice may be linguistically sound for one group of words but may not be sound for another.

A	B
*fall*ing	w*hen*
*stop*ped	*the*n
*jump*ed	*cat*ch

"Little words" may be found in the words in Group A since they contain a root word with a suffix added. Group B, however, cannot be used in this way. The word *hen* is not in *when* and *then* because the *wh* in *when* is phonemically pronounced /hw/ and the *th* in *then* is one phoneme /ð/. The word *cat* is not clearly audible in *catch*. Only in technical phonetics is it analyzed as /kaetš]. Obviously this type of exercise should not be used with words that are not phonemic in their spelling.

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[9] *Ibid*., p. 267.

Suggested Uses of Linguistic Principles

The consonant and vowel sounds that are already being taught in phonic programs are called segmental phonemes. Language, however, is more than a linear series of segmental phonemes. Another kind of phoneme, the supra-segmental phoneme, also serves to differentiate one utterance from another. These phonemes derive their names from the fact that they accompany the segmental phonemes and are written above the line in phonemic transcription. These phonemes in English are referred to as stress, pitch, and juncture. Juncture will be discussed in the chapter on syntax. Stress refers to the relative force of articulation of a given syllable. Both stress and pitch are relative values that vary according to the utterance in which they appear.

> The distribution of the pitch phonemes of an utterance, plus the terminal juncture, make up the intonation contour of the utterance. Every intonation contour consists of a number of pitch phonemes rising to a single peak and falling from that peak to a terminal juncture.[10]

As an example of the supra-segmental phonemes of intonation, read the following sentences with high pitch given to the underlined words.

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[10] Cynthia D. Buchanan, *A Programmed Introduction to Linguistics* (Boston: D. C. Heath and Company, 1965), p. 255.

The *man* is here.
The man *is* here!
The man is *here*?

One is aware of the difference in meaning and aware that pitch makes the difference in the otherwise identical utterances. Pitch is, therefore, phonemic.

Some linguists point out that when words are read from word lists, the reader tends to apply the whole sentence contour to each word, giving every word heavy stress and ending each one with the falling pitch that usually comes at the end of sentences. This may develop a habit of pronouncing individual words in sentence-intonation manner while reading, and could lead to a pattern of meaningless word calling.

The linguist, Lefevre, has questioned this practice of reviewing words from word lists.

> If school children study and practice reading single words in isolation or in structureless groupings, however, this natural pattern of one-word answers may become confused with unnatural patterns and unnatural intonations. Reading isolated words, or reading vertical or horizontal lists from the board or from books, is bound to produce the intonation pattern of finality on every single word. This practice will then contribute to that word calling in primary reading that leads to patternless 'word perception' without comprehension of either structure or meaning.[11]

Exercise No. 1. If children need practice in word recognition, these words could be presented in sentence form rather than as items in a list. For beginning readers, these sentences may be simple. They could consist of the words needed for practice and a few other words which have been taught previously. Reviewing the vocabulary in this way will not only renew the child's "sentence sense" but will also add meaning to the words being taught or reviewed.

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[11] Carl A. Lefevre, *Linguistics and the Teaching of Reading* (New York: McGraw-Hill Book Company, 1962), pp. 54-55.

An example of what could be done with minimal sentence frames will follow. For this example, the entire vocabulary of one pre-primer was chosen.[12] The list included the following words: Jack, Janet, Tip, come, there, with, go, you, home, play, will, ball, is, not, no, and, find, me. All the words from this list that can be fitted into the same space in the sentence frame are listed under the word they could replace. Words that could be used to expand the sentences are enclosed in parentheses.

The teacher could begin the exercises of this type by using a known word in the space and then substituting the words to be reviewed.

The words no, not, with, the, and, will are not substituted for other words in these particular minimal frames. They are structure words and, in these sentences, would receive review by appearing in the frames and performing the function assigned to them in the English language. Frames could be made, or expanded, to include any structure word the teacher desired to use. Structure words could also be substituted for each other and frames could be made for adjectives and adverbs. (See Chapter III on syntax.)

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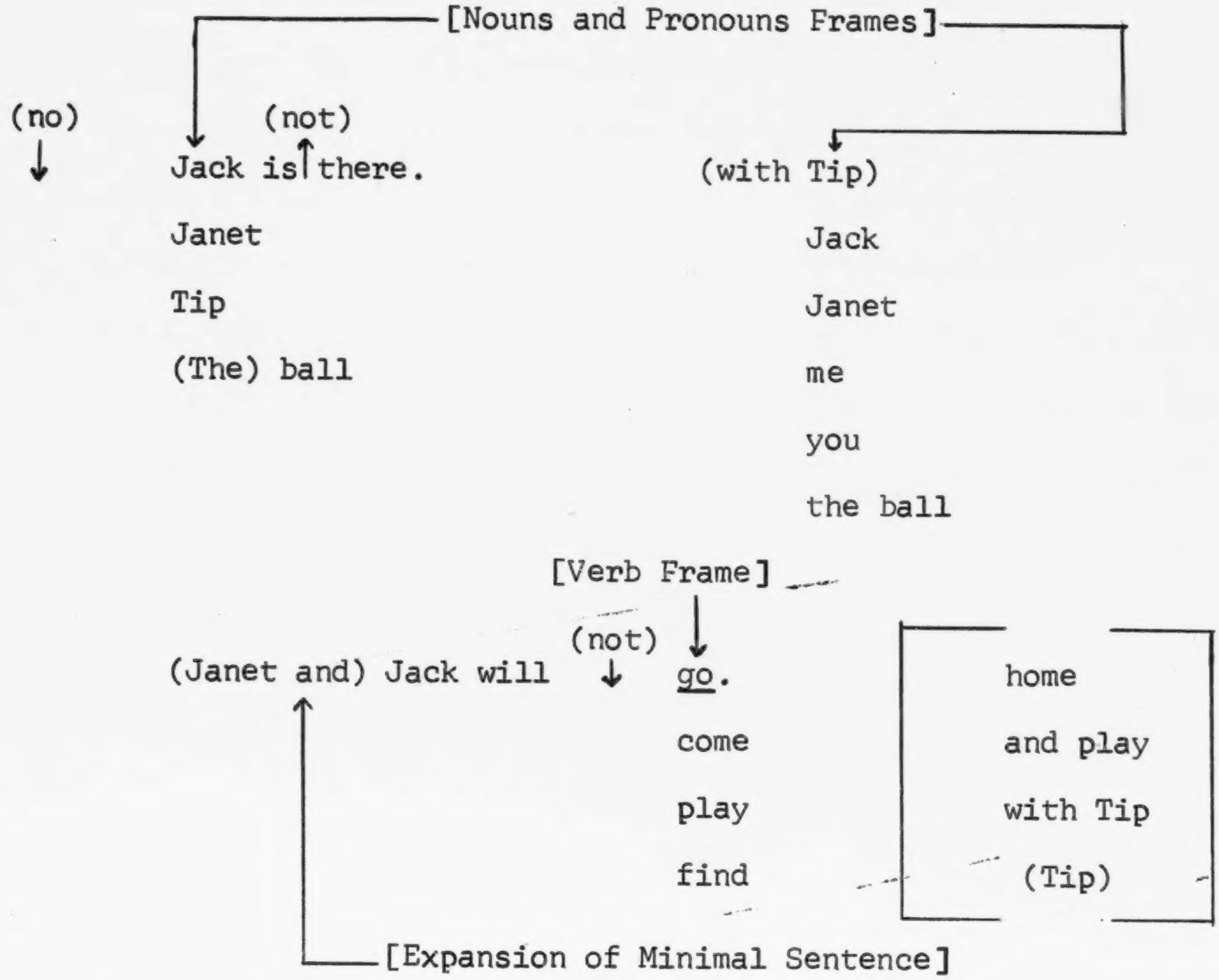
[12] Paul McKee, et al., Tip (Boston: Houghton Mifflin Company, 1957), p. 64.



[Nouns and Pronouns Frames]

(no) Jack is (not) there. (with Tip)

Janet

Tip

(The) ball

Jack

Janet

me

you

the ball

[Verb Frame]

(Janet and) Jack will (not) go.

come

play

find

home

and play

with Tip

(Tip)

[Expansion of Minimal Sentence]

This procedure could be varied to allow the pupils to make the sentences themselves from word cards. The cards could be placed on the chalk rail and the pupils allowed to choose cards and make or expand sentences in a pocket chart.

Exercise No. 2. An exercise that will give students practice in the substitution of consonant phonemes may be developed as follows:

Directions: Draw a line under every letter at the end of the sentence that may be written into the blank space in the sentence and give meaning to the sentence.

1. The tree is __all. t c f
2. Did mother __all me? c f t
3. Please don't __all down! t c f

The same procedure may be used with vowel phonemes.

Directions: Write the correct vowel in the blank space in the sentence that will give meaning to the sentence.

1. The tree is t__ll. e a i
2. Did you t__ll the class your story? a e i
3. I will wait here unt__l you come. i e a

Exercises of this type permit the morpheme to retain such characteristics as part of speech and meaning in context.

The classroom teacher can think of many variations of the above suggested exercises. One adaptation may provide a sentence with very general meaning, such as "the __all is long," and request the student to use as many different phonemes as possible to give the sentence meaning. The student might think of /w/ (wall), /h/ (hall), /f/ (fall)(season of the year), /b/ (ball) (football), and, perhaps, others.

Beginning readers need to be able readily and automatically to associate the procedure for forming the beginning sound of a word with the grapheme or letter that prompts the procedure. When a child sees the morpheme top he needs promptly to place his tongue on the gum-ridge (alveolar ridge) behind his upper teeth and stop his breath in preparation to say the word top. Most children know how to pronounce the sounds of the language when they come to school and will readily learn to make this relationship. Other children will have trouble pronouncing certain sounds and will need more specific instruction from the teacher. The following exercises and games might be helpful for these children.

Exercise No. 3. Describe the articulatory positions for a beginning consonant sound and ask a student to form the mouth position and then say a word. For example, "place your lips together and blow them apart without using your voice. What word might you say?" The child can give numerous correct answers--provided they all start with the consonant phoneme /p/--pet, Paul, pumpkin, etc.

The English Phoneme Charts will give the teacher help in sound description.

A variation of this suggestion would be for the teacher or a student to "get ready to say a word" and let fellow students decide what letter will start the word. The student might say, "I'm getting ready to say a word. What letter will it start with?" The student then places his mouth in proper position to form a beginning sound and classmates attempt to recognize the position and associate it with the correct letter. Voice will be the determining factor in sounds such as /p/, /t/, and /m/, since they all have the same articulation points.

The game might be carried farther if classmates can guess the word from the student's acting out or defining the word.

ORTHOGRAPHY

Relationship to Phonics and Reading

> A phonics program in spelling is complementary to a phonics program in reading but it is not the same in emphasis. In reading, the function of phonics is to help the reader make a connection between the sounds of letters he sees and the sounds of words that are in his oral vocabulary. The emphasis is on recognition. In spelling, on the other hand, the function of phonics is to help the writer decide what letters should be set down to represent the sounds of the words he wants to write. The emphasis is primarily on the reproduction of sounds rather than recognition of them.[13]

The primary purpose of spelling is to enable readers to gain meaning from what is written. If a child had no need to write for anyone but himself, he might work out a code to fit his own purpose. However, it is essential that there be a conventional system for translating meanings and oral symbols into graphic symbols.

History

Prior to the publishing of Samuel Johnson's *A Dictionary of the English Language* in 1755, English speaking people spelled pretty much as they pleased. For instance, *guest* might appear in print as *gest*, or *geste*, *ghest*, *gueste*. Even though the printers wanted some sort of regularity about the way words were spelled, they found it hard to agree. Gradually people accepted the spelling in early English dictionaries. The forms came to be considered standard and all other spellings were considered wrong.

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[13] Lillian E. Billington, *Spelling and Using Words* (Dallas: Silver Burdett Company, 1958), p. 3.

With the publishing of Noah Webster's famous "blue-backed speller" in 1783, Americans became perhaps even more conscious of correct spelling than the English and more arbitrary in their adherence to standards. Americans and English still do not always agree upon spelling. For instance, Americans write *labor*, *check*, *fulfill*, *mold*, and *learned*; whereas the British prefer *labour*, *cheque*, *fulfil*, *mould*, and *learnt*.

When we attempt to match letters and sounds in some of our most commonly used words, we will understand why teaching spelling is difficult. Note the nine common ones, some of which are borrowed from French.[14]

Common Spellings of *ā* /ey/

a -- as in aerial

a -- as in mate (followed by silent e)

ay -- as in play

ei -- as in veil

ea -- as in great

ai -- as in chair

eig -- as in reign

eigh -- as in neighbor

Less Common or Borrowed Spellings

eh -- as in eh

ee -- as in entree

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[14] Ruth G. Strickland, *The Language Arts in the Elementary School* (Boston: D. C. Heath and Company, 1957), p. 369.

é -- as in fiancé

et -- as in croquet

au -- as in gauge

Suggested Uses of Linguistic Principles

Because of their many variations and combinations, the vowel sounds are very difficult to teach. For this reason, many writers list a number of rules which they hope will aid the teacher in teaching spelling. Many of these rules prove very inadequate due to many "exceptions to the rule." The following rules were taken from Dr. Clymer's analysis which was based on words from four basic reading series grades 1-3. Only rules that fell no lower than 75 per cent utility were chosen.[15]

Vowel Rules	Per Cent of Utility
1. When *y* is the final letter in a word, it usually has a vowel sound.	84
2. When there is one *e* vowel in a word that ends in a consonant, the *e* usually has the short sound.	76
3. When the letters *oa* are together in a word, *o* always gives its long sound and the *a* is silent.	97
4. Words having double *e* usually have the long *e* sound.	98
5. In *ay* the *y* is silent and gives *a* its long sound.	78
6. The *r* gives the preceding vowel a sound that is neither long nor short.	78
7. When *a* is followed by *r* and final *e*, we expect to hear the sound heard in *care*.	90

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[15] George D. Spache, *Reading in the Elementary School* (Boston: Allyn and Bacon, Inc., 1964), pp. 291-293.

Vowel Rules	Per Cent of Utility
8. When c and h are next to each other, they make only one sound.	100
9. When the letter c is followed by o or a, the sound of k is likely to be heard.	100
10. When ght is seen in a word, gh is silent.	100
11. When a word begins with kn, the k is silent.	100
12. When a word begins with wr, the w is silent.	100
13. When a word ends in ck, it has the same last sound as in lock.	100
14. When two of the same consonants are side by side only one is heard.	99
15. When c is followed by e or i, the sound of s is likely to be heard.	96
16. Ch is usually pronounced as it is in kitchen, catch, and chair, not like sh.	95
17. When ture is the final syllable in a word, it is unaccented.	100
18. When tion is the final syllable in a word, it is unaccented.	100

The "two vowels together" rule, "When two vowels go walking the first one does the talking," which is very popular with many authors of basal and phonic series, has been omitted from the above list because Dr. Clymer's analysis and the research done by Henry D. Rinsland indicates that the rule actually applies less than fifty per cent of the time. Some exceptions to this rule are: ea /e/ in bread; ea /a/ in heart; ou /u/ in should; ou /ə/ in trouble; ou /ɔ/ in cough; oo /ə/ in blood; oo /u/ in foot; oe /ə/ in does; ai /æ/ in plaid; ai /e/ in said;

ie /e/ in friend; ie /e/ in heifer.[16]

In view of these findings, can teachers justify teaching children a number of rules which frequently fail to function or which work only in a relatively small number of words?

Exercise No. 1. Rather than teaching spelling rules, the teacher who wishes to apply linguistic principles to her spelling instruction might set up minimal spelling frames. For example, the spelling rule, "When there is one vowel in a word ending in a consonant, the vowel has the sound commonly referred to as the 'short' sound," may become the minimal spelling frame (C) VC. The (C) represents the presence or absence of a consonant or consonant cluster (two or more consonants grouped together) in this position. Frames should be introduced in sequence according to difficulty beginning with the simplest rule and proceeding to the most difficult. The student may then use the frame to substitute graphemes to form words having the "short" vowel sound.

Minimal Spelling Frame	(C)	V	C
Substitution of Graphemes		i	t
	s	e	t
	sh	o	p

The familiar rule, "If a word ends with a vowel-consonant-*e*, usually the vowel is long and the *e* is silent," will develop into the following frame:

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[16] Alvina Truet Burrows and Zyra Lorie, "When Two Vowels Go Walking," *The Reading Teacher*, XVII (November, 1963), 80-81.

Minimal Spelling Frame	(C) V C e
Substitution of Graphemes	cr a n e
	t i d e
	d o z e
	m u l e

A more involved rule concerns "dropping the *e* to add a suffix beginning with a vowel." A frame to fit this rule might look something like this:

Minimal Spelling Frame	(C) V C e + V (C) = (C) V C V (C)
Substitution of Graphemes	b a k e + i ng = b a k i ng
	b a k e + e d = b a k e d

The rule that tells the student to "double the final consonant before adding a suffix beginning with a vowel" adapts in like manner.

Minimal Spelling Frame	(C) V C + V (C) = (C) V C C V (C)
Substitution of Graphemes	c a n + e d = c a n n e d
	c a n + i ng = c a n n i ng

These suggestions for a linguistic approach to the teaching of spelling are in keeping with spelling-sound patterns as advocated by Betts. "In each of the following spelling patterns (sequences of letters that represent sequences of sounds), the letters represent consistently certain sounds, as follows:

> 1. The (consonant)-vowel-consonant pattern, as in *at*-*cat*-*hat*, *set*-*sent*, *hot*-*hop*, etc. This pattern *is* also *called* the 'short vowel rule.'
>
> 2. The (consonant)-vowel-consonant-final *e* pattern, as in *came*-*game*, *hide*-*ride*, etc. This pattern is also *called* the 'final *e* rule.'"[17]

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[17] *Department of School Services and Publications* (Curriculum Letter No. 60. Connecticut: Wesleyan University, 1964), pp. 1-2.

Exercise No. 2. It is to be expected that students will immediately begin to find exceptions. Some action should be taken with these as soon as they appear. The class might develop a chart of the exceptions that will not fit the minimal spelling frames, and as exceptions are located, they could be written on the chart. The chart might take the form of a phoneme/grapheme correspondence chart and should be developed as the minimal spelling frames are introduced.

Ives has developed a very detailed chart unpublished at this writing of the phoneme-grapheme-correspondence type. He uses the International Phonetic Alphabet, Trager-Smith, and Thorndike-Barnhart as alternative transcriptions of phonemes and labels his column heads with grapheme patterns. One corner of his chart is in Table I.[18]

Pronunciations, as listed in Ives's chart, are standard for his region. The classroom teacher would use pronunciations that are standard for her region in developing her Exceptions to the Spelling Frames Chart. Of course, the purpose of the Ives chart is not the same as that suggested for the exception chart, but the development of his chart gives guidance for the development of the suggested classroom chart. A chart for classroom use need not be as involved as Ives's chart nor refer to the same sources of phonemes. The dictionary in common use by the students may be sufficient for elementary classroom purposes.

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[18] Sumner Ives, "Preliminary Lay-Out for Phoneme-Grapheme Correspondences Showing Important Differences in Distribution of Phonemes" (Chart displayed at Linguistics in Reading Institute, The University of Mississippi, University, Mississippi, June 10, 1965).

TABLE I

PRELIMINARY LAY-OUT FOR PHONEME/GRAPHEME CORRESPONDENCE, SHOWING IMPORTANT DIFFERENCES IN DISTRIBUTION OF PHONEMES

IPA	Trager-Smith	Thorndike Barnhart	One V and one C in sound; one V and one C or two C in spelling		One C in sound; two C and E in spelling	Two syllables; one or two C in sound; two C in spelling
			VC (C)		(V) VCCE	VCCV
i:	iy	e see			breathe seethe	
I	y	i pin	bit limb	sing*	bridge	little litter pistol
e:	ey	a face	base*	sing*	bathe	danger

The exceptions chart will have columns headed by minimal spelling frames and the class will list exceptions. Ives looks for examples that fit his grapheme pattern heading.

The teacher who wishes to do so might refer to a dictionary for the historical background of the words that are exceptions and show why they are exceptions, or the child might be inspired to do this on his own. This will provide a meaningful opportunity for the child to use the dictionary. It will also provide opportunity for the teacher to expand the child's knowledge of dictionary usage.

The linguist would be the first to agree that meaning is inherent in teaching spelling. The child should learn spelling skills in relation to all other language arts. He should meet his new words in a reading situation and be tested on them in meaning context. He should analyze them in terms of sound, meaning, and usage.

Correct spelling does for the reader what correct pronunciation and clear enunciation do for the listener--it insures communication of meaning. A good spelling program should promote associative learning instead of mere rote learning.[19]

SUMMARY

Linguistics has much to offer the teacher of reading and spelling. Through years of modern scientific study of language, linguists have discovered a body of knowledge that can enrich as well as clarify many areas of the language arts.

Linguistics has provided systematic insight in regard to word perception, recognition, intonation, and the ability to think in a language.

The field of phonemics has provided a scientific basis for many of the phonics programs which are being used in our schools today, but in some programs phonics has been misused because of a lack of understanding of the true nature of our language and the learning process.

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[19] Emmett A. Betts, et al., Teacher's Guide Book Language Arts Spellers (Atlanta: American Book Company, 1954), p. 5.

The linguist describes the language; he does not prescribe. It is the job of educators to learn how to apply this knowledge in the field of teaching.

The foregoing chapter attempts to give teachers a brief summary of phonemics and suggests ways in which linguistic principles might be applied in teaching reading and spelling. The creative teacher will discover, on her own, other ways of applying these principles in the classroom.

CHAPTER II

MORPHOLOGY IN THE TEACHING OF READING

Monteene McCoy, Juanita Miles,
James Ronald, June Vineyard

INTRODUCTION

The purpose of this paper is to relate morphology, one field of linguistics, to the teaching of reading. Morphology will be specifically defined later, but it is referred to at this point as a single part of the total spectrum of linguistic science.

The nature of linguistics, itself, being a description of the language, demands that its application to reading be in fact an application to the language arts program: reading, writing, spelling, oral and written language. The writers of this chapter believe the application of these principles can be of great value to the teacher of reading. This knowledge can be applied effectively in the teaching of such skills as word recognition, change of word function, structural meaning, sound derivation without a change in spelling, the effect of stress on word meaning, and comprehension.

DEFINITION OF MORPHOLOGY

The term morphology comes from morpho meaning form, and logy, meaning science. It, then, means a science of forms. "Morphology is the study of morphemes and their arrangement in forming words."[1] This definition suggests that an understanding of the term morphology relies upon other linguistic terminology, particularly the term morpheme. For purposes of analysis and description, the linguist has divided human speech into various units.

Smaller units, such as phonemes and morphemes, are combined to form larger units, sentences, or utterances. The smallest unit, the phoneme, is simply a speech sound and has no meaning in itself. The next unit, the morpheme, is defined as the smallest unit which conveys meaning. The morpheme is neither the most meaningful part of the sentence, nor the largest speech unit.

Morphology, or the study of morphemes, then, corresponds to a study of words. This is not to say that the terms morpheme and word are synonymous. Some words are composed of one morpheme; other words combine two or more morphemes.

Gleason defines morpheme as the "smallest meaningful unit (of speech) . . . a unit which cannot be divided without destroying or drastically altering the meaning."[2] This means that a given portion of speech is a morpheme if it cannot be divided into further meaningful parts (morphemes).

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[1] Eugene A. Nida, Morphology: The Descriptive Analysis of Words (Ann Arbor: University of Michigan Press, 1949), p. 1.

One test for determining whether a segment of speech is a morpheme is to find whether it appears repeatedly in various utterances with approximately the same meaning. This insures that it is a meaningful unit.

The portion man /mæn/ is tested below:[3]

The man is here. A big man appeared.
He hurt that man. Mankind is good.

According to the first test, man is a morpheme.

Another test asks whether the portion can be broken into smaller pieces, each of which "recurs with approximately the same meaning, in such a way that the whole form is related to the meaning of the smaller pieces."[4]

Man is tested again by dividing it into parts which could conceivably compose separate morphemes:

Draw a map. I slept on a mat. She read the magazine.

It is thus concluded that since ma /mæ/ does not recur with the meaning it has in man, that ma /mæ/ is not a morpheme.

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[2] H. A. Gleason, Jr., An Introduction to Descriptive Linguistics (New York: Holt, Rinehart and Winston, Inc., 1955), p. 53.

[3] Phonemic transcription is used to show the pronunciation of words and phrases that could not be shown by spelling alone.

[4] Charles F. Hockett, A Course in Modern Linguistics (New York: The Macmillan Company, 1958), pp. 123-124.

Portions a and an are tested:

hat /æ/ matter /æ/ an apple /æn/ pan /pæn/

It is concluded that neither the a nor the an in man is a separate morpheme. Therefore, the second test shows that the form man /mæn/ is only one morpheme. A final conclusion is that man /mæn/ is a morpheme.

Morphemes, like man, which can occur as separate words, are called free morphemes. Bound morphemes, on the other hand, are always found joined to free morphemes, as the affixes in sleepy, asleep, and sleeps. If a morpheme never occurs free but nevertheless is found combined with other morphemes in the same way that free morphemes are, it is classed as a bound-base morpheme, as cranberry (compare blueberry), uncouth (compare unkind), and receive (compare redo). Although bound-base morphemes occur frequently in English they are best learned in conjunction with the words in which they occur rather than separately.

For instructional purposes, two groups of bound morphemes are most significant: inflectional and derivational morphemes. For the most part, they are affixes. It is important to emphasize, however, that not all of them are. The morpheme may instead be a replacement of one phoneme by another. For example the a /æ/ in man becomes e in men.

Inflectional morphemes are attached to a word without changing its part of speech. Examples are s for plurals, ed for verb past tense, and est for adjective comparison.

The other kind of morphemes, the derivational, is a signal for the part of speech of the word in which it occurs. Such morphemes often change words from one part of speech to another. The suffix *ment* changes the verb *develop* to a noun, *development*; the prefix *be* changes the noun *friend* to a verb, *befriend*.

A few prefixes do not change the part of speech, such as *un*wise or *re*bind. These will be treated separately.

INFLECTIONAL MORPHEMES

Nouns

A discussion of inflectional word forms can be built around the traditional parts of speech. This is expedient since certain forms attach to certain parts of speech.

In English, nouns may be singular or plural. "A structural definition of a noun is a word that can take a plural inflection."[5] The regular plural inflection is an *s* or *es* which spells a separate but bound inflectional morpheme.

The pronunciation of the plural morpheme is determined by the ending of the free morpheme to which it is bound. Three variant pronunciations of the *s* plural are shown below:

hats /s/ bugs /z/ houses /ɨz/ (in some dialects /əz/)

Further examples of plurals with the /a/ pronunciation reveal that it follows voiceless stop consonants /k/, /p/, and

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[5] Carl A. Lefevre, *Linguistics and the Teaching of Reading* (New York: McGraw-Hill Book Company, 1962), p. 147.

/t/, and voiceless fricatives /f/ and /θ/:

/ks/	hooks
/ps/	maps
/ts/	bats
/fs/	cliffs
/θ/	baths

The /z/ pronunciation of the plural s follows voiced stop consonants /g/, /b/, /d/ and voiced fricatives /v/ and /ð/.

/gz/	pegs
/bz/	ribs
/dz/	floods
/vz/	caves
/ðz/	lathes

The /z/ pronunciation also follows the continuants /l/. /r/, /m/, /n/, /ŋ/, and the vowels.

/lz/	hills
/ŋz/	slings
/eyz/	days
/owz/	blows

To summarize, the regular plural has the /s/ sound when it follows voiceless consonants and vowels.

In the case, however, of words after which /s/ or /z/ would be difficult to pronounce, a weak stressed vowel and /z/ are added: /ɨz/. This pronunciation follows /s/, /z/, /č/, /ǰ/, /š/, /ž/; that is, all the sibilants.

/sɨz/	glasses

/zɨz/	roses
/čɨz/	patches
/ǰɨz/	bridges
/šɨz/	brushes
/ž+z/	garages

Variations in pronunciation of a morpheme are called allomorphs. The forms /s/, /z/, and /ɨz/ are allomorphs of the plural morpheme. That is, the three pronunciations have the same meaning.

Another type of ending, the consonant y, calls for the /z/ allomorph, of the plural morpheme. These words, such as parties and babies, are phonemically regular. Only their spelling is irregular (the letter y is replaced by the letter i as letters es are added).

Some irregular plurals such as sheep and deer do not add the s. These words are said to have zero allomorphs of the plural morpheme.

Replacive plurals, such as men, in which one phoneme is substituted for another can also be considered irregular. The following pairs of phoneme groups show how a replacive morpheme forms plurals:

man men goose geese tooth teeth.[6]

Several nouns, ending in the voiceless fricative /f/ (when spelled with single, final letter f), replace the final phoneme before the plural morpheme. The /f/ is replaced by the voiced fricative /v/ before the /z/ is added:

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[6] Gleason, op. cit., p. 74.

leaf	leaves
wolf	wolves
half	halves

Plurals such as *oxen* and *children* can be accounted for as relics of common Old English forms. These plural allomorphs are rare and it does not seem valuable to make generalizations concerning them.

Possessive nouns are formed by the addition of a morpheme phonemically identical to the regular plural morpheme. It is distinguished, however, in writing as *'s*. It is added to the singular (as man's) and to irregular plurals (as men's), but not to regular plurals. Unlike the plural, the possessive form has no irregular substitutes for the *'s*.

If, however, a noun ends in /s/, /z/, or /ɨz/, the possessive morpheme may become zero, *Doris'* or *Doris's*. To plurals ending in *s*, only the apostrophe is added: *girls' room*.[7] Thus the allomorph of the possessive morpheme is zero after regular plurals. The change is in the writing of them only.

The possessive morpheme sounds like the plural but patterns differently. Nouns with the possessive form take the position of an adjective, whereas plurals retain noun position.[8]

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[7] *Ibid*., p. 152.

[8] See chapter III for further discussion of these

The understanding of this pattern difference between possessives and plurals is valuable to word recognition and comprehension. Lefevre suggests, in fact, that this skill is sufficiently valuable to make the use of the apostrophe unnecessary.[9]

A possible implication of this pattern difference is that emphasis should be placed on recognition of this pattern rather than solely on spelling.

These sentences contrast the use of *boys* and *boy's*. The teacher can make other similar frames for this practice.

The __________ face is red.   boy's

The __________ went to play.   boys

Pronouns

The inflection of pronouns is highly irregular. The following examples show that form is drastically changed as position in sentence is changed.

He is here.	*They* won the race.
Give *him* the book.	Give *them* the prize.

It can be observed that some pairs even have no common phonemes. For example:

I   me   we   us

These variants are allomorphs of *I* and this change is called inflectional, since they remain in the pronoun class.

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positions. Fries demonstrates that they take the same position as articles, etc., in *The Structure of English* (New York: Harcourt, Brace, and World, Inc., 1952), p. 89.

[9] *Ibid*., p. 151.

Analysis of pronoun allomorphs themselves is less useful than the analysis of their structural meaning in context. The function of some allomorphs is to take the possessive adjective position such as my book or his pen. The function of two other kinds of allomorphs is to occupy the subject and object position of the sentence respectively: He hit him. One particular pronoun, her, can serve both these positions without changing its form. This is her car. I hit her.

The genitive pronouns my and mine, having the same referent, actually function differently. Both can take an adjective position, but not the same position.

The report is mine.   This is my report.

Both serve as adjectives, but they cannot exchange positions as most adjectives could in such an environment.

Verbs

The third person singular noun calls for a verb to which an inflectional morpheme is affixed. Grammarians call this situation agreement in number between noun and verb. Linguists describe the relationship as tied.

Example:

The boy runs.

When the verb contains the s affix, the same pronunciation pattern is followed as in singular nouns where the s is added (see above). Examples follow:

/s/   hits

/z/ grinds

/ɨz/ rushes

Students should be led to discover that only nouns (or noun substitutes) are plural. A verb, however, looks "plural" whenever it is tied to a singular subject.

According to the linguist, the relationship between the subject and verb is the most basic pattern of the sentence. Since the student already speaks sentences, it should be possible to utilize his sentence sense to strengthen his concept of plurality. Teaching in this area should result in not only a better understanding of subject verb agreement, but an improvement of reading comprehension in general. The student would compare pairs of sentences such as:

The boy talks.

The boys talk.

A similar pattern of pronunciation is followed in adding the past tense and past participle morpheme to regular verbs. This morpheme is spelled ed and its sound is /t/, /d/, or /ɨd/ depending upon the final sound of the free morpheme to which it is added.[10]

Regular verbs ending in one of the following phonemes take the allomorph /d/:

/b g v ð z ž ǰ m n ŋ l r y w h/ (voiced including all vowels)

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[10] Ibid., p. 153.

Example:

burn burned

The following final phonemes call for the /t/ (voiceless):

/p k f θ s š č/

Example:

trip tripped

Two final phonemes call for the /ɨd/ or /d/ (alveolar stops).[11]

/t/ /d/

Example:

want wanted

A frame such as the following can be used to illustrate that all the endings added to make the part participle of the very have the same meaning, regardless of sound.

Think of as many single verbs as you can that can be used in the blank:

Bill has ______________ today.

A child will think of such words as *walked*, *laughed*, *played*, *painted*, etc. This concept that the *ed* has meaning will carry over into attack of unfamiliar verbs.

Children, as well as adults, are often confused by the sound differences in such inflected verbs as *ripped* /ript/, and *rigged* /rigd/. They notice that each follows the same spelling pattern but obviously sounds different. One may thus be tempted to spell the endings differently.

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[11] Gleason, *op. cit.*, p. 102.

While it may not be practical to explain this difference to children in terms of phonemes and morphemes, it is valuable to teach them that this is a structural pattern based on the final sounds in rip and rig. Otherwise, they are likely to conclude that either /ript/ or /rigd/ is an irregular verb and, therefore, no useful generalization can be made.

One rule in seeking and teaching generalizations applies to verbs as well as other parts of speech. Look for phonemic sound patterns, as in rip and rig, rather than spelling patterns. This is especially appropriate when dealing with inflections.

One of the most amazingly regular inflections is ing. Both the verb and the suffix retain their phonemic form in all verbs--even in the highly irregular be.

Examples:

being having crying kicking hitting going

Recognition that ing remains intact when affixed to the verb helps to avoid spelling errors in such verbs as cry, when ing is added. The stability of this rule is valuable also in distinguishing between the inflection ing and that same incidental grouping of letters in other words such as ring, sting, and sling.

The following frame calls for verbs with the ing ending. Children, while experimenting with this frame, will gather material that illustrates the meaning of ing as a suffix. Use a single verb to fill the blank:

Mary is ___________ them.

Examples such as watching, painting, stopping, and helping will be given.

With this material, children can generalize that the final phoneme of the root word does not determine the pronunciation of the *ing* affix unlike the case of the *ed* affix.

In summary, for regular verbs follow this pattern:

	V		(base)
	V + *s/es*	/s/, /z/, /ɨz/	(third person singular)
Verb Parts	V + *ed*	/d/, /t/, /ɨd/	(past)
	V + *ing*		(present participle)
	V + *ed*	/d/, /t/, /ɨd/	(past participle)[12]

Inasmuch as there are also many irregular verbs the teacher must expect children to insert their forms into the frames for *ed* and *ing* forms suggested above. He can then be shown that *ed*, *en*, *t*, etc. give the same meaning to the word to which they are added even though spelling and sound vary.

The following irregular verbs are grouped according to their patterns for forming the past tense and the past participle. The list is not meant to be a complete list of irregular verbs of the English language. Its purpose is to present a categorized list of irregular verbs.

1. bet, burst, cast, cost, cut, hit, hurt, let, put, quit, rid, set, shed, shut, spit, split, spread, thrust, wet

   Example: *cut* *cut* *cut*

2. cling, dig, fling, shrink, sink (transitive),

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[12] Lefevre, *op. cit.*, p. 208.

sling, slink, spin, sting, stink, string, swing, win, wring

Example: *spin* *spun* *spun*

3. creep, deal, feel, keep, leap, mean, sleep, sweep, weep

   Example: *mean* *meant* *meant*

4. bleed, breed, feed, lead, meet, plead, read, speed

   Example: *lead* *led* *led*

5. begin, drink, ring, sing, sink (intransitive), spring, swim

   Example: *drink* *drank* *drunk*

6. drive, ride, rise, smite, strive, thrive, write

   Example: *ride* *rode* *ridden*

7. bend, build, lend, rend, send, spend

   Example: *send* *sent* *sent*

8. freeze, speak, steal, weave

   Example: *speak* *spoke* *spoken*

9. bind, find, grind, wind

   Example: *bind* *bound* *bound*

10. blow, grow, know, throw

    Example: *know* *knew* *known*

11. bear, swear, tear, wear

    Example: *tear* *tore* *torn*

12. forsake, shake, take

    Example: *take* *took* *taken*[13]

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[13] Gleason, *op*. *cit*., pp. 101-103.

When young speakers recognize the regular pattern of verb inflections, they are likely to use them on irregular verbs. Children may say "John runned away." This is a logical outcome of saying "John rubbed his eyes" or "John stopped the ball."

Since this is the kind of generalization that is needed in applying regular patterns, teachers must use caution in correcting this error. To inhibit the continued experimentation with inflections could check the expansion of the child's vocabulary.

Adjectives

The comparison of adjectives involves another type of inflectional morpheme. Not all adjectives take er and est affixes, but it can be generally stated that one or two-syllable adjectives do. These shorter adjectives are compared as follows:

rich	richer	richest
lovely	lovelier	loveliest

Adjectives of three syllables are not usually inflected. That is, their comparison is shown by another word, more or most, rather than a signal within the word:

Example: more beautiful most impolite

Just as it is difficult to explain the changes in irregular pronouns by the behavior of morphemes and allomorphs, the same is true of irregular adjectives.

Example:	good	better	best
	little	less	least

These must be recognized as exceptions.

In light of the foregoing discussion, it can be concluded that a knowledge of noun, verb, and adjective inflections can be valuable as a tool for reading, writing and speaking. If the learner is able to recognize variations of a given word without losing sight of its function in the sentence and its basic meaning he will master its comprehension.

One specific application of inflection is vocabulary building. Inflections and their patterns provide for the expansion of vocabulary beyond words that have been heard or seen in print. For example, the understanding that s affixes to most common nouns enables one to make his own plurals without learning each plural separately. He thus expands the number of nouns he can say, write, and read. Even sophisticated readers use this simple tool.

DERIVATIONAL MORPHEMES

Affixes Which Change Word Class

There are a great many suffixes and prefixes which, unlike inflectional morphemes, change the part of speech of the word to which they are affixed, eg. merry becomes a noun by adding ment: merriment. It should be pointed out that merry and ment are both morphemes, or meaningful units, before they are combined. No one would argue that merry is not meaningful, but the meaning of ment may not be equally clear.

It is possible to prove that ment has a meaning by determining that it is a morpheme. If it is found in different environments with the same meaning it has in *merriment*, it can be called a morpheme. It is tested as follows:

> The men reached an agree*ment*.
>
> A state*ment* was released.
>
> Employ*ment* will increase.

The conclusion is that *ment* recurs with the same meaning and therefore is a morpheme.

The combination of *merry*, a free morpheme, and *ment*, a bound morpheme, is typical of the changes brought about by derivational morphemes. Verbs can become nouns, nouns can become adjectives, adjectives can become nouns, etc.

Because the change from one part of speech to another is not always accomplished by the same affix, the reader must learn to recognize several signals for each part of speech. For example, both adjectives *merry* and *active* can be changed to nouns by the addition of a suffix, as *merriment* and *activity*. Note that *ment* and *ity* are used to achieve the same operation: the derivation of a noun from an adjective.

The following table shows the variety of ways in which nouns, verbs, adjectives, and adverbs can be signalled by affixation. They are grouped in pairs, first the free morpheme and then the free morpheme plus the bound morpheme.

TABLE II

DERIVATIONAL SUFFIXES AND PREFIXES

Affix	Noun	Verb	Adjective	Adverb
al	survival	survive		
ure . . .	enclosure	enclose		
ance . . .	conveyance	convey		
ment . . .	banishment	banish		
ity . . .	conformity	conform		
sion . . .	corrosion	corrode		
age . . .	seepage	seep		
ense . . .	suspense	suspend		
er	player	play		
ant . . .	informant	inform		
y	flattery	flatter		
ing . . .	laughing	laugh		
ress . . .	actress	act		
tion . . .	correction	correct		
be	head	behead		
en	rage	enrage		
ize . . .	patron	patronize		
ify . . .	class	classify		
ness . . .	redness		red	
ity . . .	oddity		odd	
th	death		dead	
ism . . .	catholicism		catholic	
y	sun		sunny	
ly	lord		lordly	
ish . . .	boy		boyish	
al	section		sectional	
ous . . .	zeal		zealous	
ic	atom		atomic	

TABLE II (Continued)

Affix	Noun	Verb	Adjective	Adverb
ar	circle		circular	
ary . . .	sediment		sedimentary	
ful . . .	truth		truthful	
less . . .	time		timeless	
like . . .	child		childlike	
ate . . .	passion		passionate	
en	flax		flaxen	
ed	paint		painted	
a	drift			adrift
ly	game			gamely
en		tighten	tight	
en		enrich	rich	
dis . . .		disable	able	
ize . . .		polarize	polar	
ent . . .		persist	persistent	
able . . .		work	workable	
some . . .		trouble	troublesome	
ory . . .		anticipate	anticipatory	
en		sunk	sunken	
ly			soft	softly
a			loud	aloud

Most of the categories sampled above have many more members than are shown. The words are placed in a table only to illustrate the function of the affixes. From the table one can gather signals for each of the four parts of speech which take derivational affixes. Such morphemes as *ish*, *al*, *ous*, *ary*, and *like* suggest the adjective. The verb is signalled by *ize*, *en*, *ify*, etc.

Some affixes are used in more than one part of speech. One such suffix is *ly*. It can mark either an adjective or an adverb. Example: See the queen's *stately* carriage. Come here *quickly*. The ending *ly* has limited ability to signal a specified part of speech, since it can mark two positions.

The affix *en* is another example of such overlapping. It can be used to mark a verb, as in "*Lighten* the burden." It can also be used to mark an adjective, as in "This is a *wooden* bowl."

Changes in Stress and Juncture Which Change Word Class

Stress is a signal which sometimes serves as a clue to the part of speech of a word. Though not included in the spelling of the word,it accompanies the word as it is spoken. Sometimes it is referred to as accent, a term familiar to language arts teachers. Children can use it as a word attack skill when attacking a word in context. Also, a knowledge of stress symbols enables one to read dictionary pronunciations.

In the following examples, stress and the pitch that accompanies it are the only internal clues to show how the word *object* is used.

I *object* to that statement.

What is the *object* of that statement?

The first shows it in verb position. Its pronunciation can be transcribed /abjékt/. The stress symbols show that the second syllable receives the stress, or emphasis, and the voice rises slightly on the second syllable. The second use, noun position, can be written /ábjekt/, to show stress on the first syllable and falling pitch on the second.

There are several other noun-verb pairs which behave in identical manner:

Examples:

Noun (stress on first syllable)	Verb (stress on last syllable)
project /prájekt/	project /prajékt/
desert /dézert/	desert /dezért/
combine /kámbayn/	combine /kambáyn/

When hearing one of these words in isolation, the child can determine its meaning only by location of the stress. On the other hand, if the word is in a spoken sentence, the child can also determine its intended meaning by its position in the sentence. In written materials, context is the only clue to the use and pronunciation of these words.

The implication to the teacher is that such words as *object* not be isolated for study. They are ambiguous when read in isolation outside their environment. For discussions or activities involving these words, sentences should always be used.

Replacement of Phonemes Which Change Word Class

Some pairs of words, which are spelled alike, vary by one phoneme. The phoneme difference determines the word's part of speech.

Examples: We used live bait. /layv/

We live in a house. /liv/

Do you associate, /əsówsièyt/, with that group?

Mr. Jones is my business associate. /əsówsiɨt/

moderate /mádərɨt/ (adjective)
moderate /mádərèyt/ (verb)

separate /sépərɨt/ (adjective)
separate /sépərèyt/ (verb)

house /haws/ (noun) house /hawz/ (verb)
use /yuws/ (noun) use /yuwz/ (verb)

It can be noted that, in addition to phoneme substitution, a stress pattern developed in the three-syllable words above. When changing to the verb, a second stress was added while the primary, or main, stress remained stationary. This difference is audible, and the trained ear detects this clue along with the phonemic difference.

The aim of this discussion is not to suggest that the ability to identify words as a part of speech is the end itself. Conscious labeling of a word is not always necessary before using it to comprehend the sentence. The term part of speech is another way of saying where a word fits into a sentence.

The English class is not the only appropriate environment for direct teaching toward this concept. The more opportunities a child has to choose between /sépərit/ and /sépərèyt/ in meaningful context, the better are his chances of comprehending it in new material.

DERIVATIONAL MORPHEMES NOT CHANGING CLASS

Negatives

Negative morphemes differ in one respect from either of the preceding categories. Although they are usually classified as derivational morphemes, they do not normally indicate a part of speech. That is, their affixation to a word does not usually change its position within the sentence.

Addition of negative affixes does, of course, change the meaning of the word. It makes the word the opposite of the word from which it is derived. Negative morphemes are prefixes. The following are typical:

own	disown
use (noun)	disuse
active	inactive
decent	indecent
legal	illegal
logical	illogical
possible	impossible
noble	ignoble
rational	irrational
kind	unkind

A few sentences will illustrate that negatives usually do not change the part of speech.

He was active. This sale is legal.

Now he is inactive. A new bill could make it illegal.

Children should think of all these prefixes as having the same meaning, regardless of their spellings and sounds. This meaning is often expressed as not and pronounced with the root word for clarity, as not legal or not rational.

For spelling purposes, those forms beginning with i, such as in, il, im, and ir, can be grouped together. They should be thought of as different allomorphs of one prefix determined by type of sound with which the other word begins.

Though these irregular negatives are few, they must be correctly identified by the reader with the spellings they have. An oral exercise such as the following suggests the kind of practice that provides opportunities for correct use of the in negatives.

List a group of negative prefixes on the chalkboard. Have students combine them with given root words to form meaningful units that sound right. Combinations should be immediately tried out in sentences:

1. ir	1. pure
2. il	2. regular
3. im	3. legal
4. ig	4. active
5. in	5. noble

Written practice materials for students often fail to point out that negative prefixes have a specific meaning. Such material as the following can be used to show that *in*, *un*, *ir*, *il*, etc. convey a negative meaning.

> Do you *own* this ball?
> He will *disown* his son.
>
> He is an *active* boy.
> She is an *inactive* girl.
>
> When the seeds are *mature*, we will sell them.
> The crying boy seems *immature*.
>
> The president is an *important* man in politics.
> This is an *unimportant* meeting.

The first sound of *never* /ŋ/ is a morpheme indicating the negative as opposed to the root, *ever*. Other similar examples of the negative use of *n* are given below:

one	/wən/	none	/nən/
either	/iyðər/	neither	/niyðər/[14]

This group is not large, but its members are used frequently.

Another small negative group is the *a* or *an* prefix.

Examples: The solution is *a*chromatic.
Some oxides are *an*hydrides.

Verb Prefixes

The prefixes *be*, *re*, and *de* are examples of another type of prefix which does not change the part of speech of the words to which it is affixed. Examples are:

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[14] Jessie M. Anderson, *A Study of English Words* (New York: American Book Company, 1897), pp. 55-56.

Reread this paragraph.

One storm can *depopulate* the island.

These prefixes usually affix to verbs. They also occur frequently with bound-base morphemes (see above).

Compounds

Compounds are a special type of word. They are composed of more than one free morpheme. In other words, the parts of a compound can stand separately. Affixes are not involved.

Early in school, children learn to recognize these forms and give them the correct name. This usually presents little difficulty. Confusion often results, however, when pairs of words may or may not form a compound, as *greenhouse* and *green house*.

Example:

We saw an unusual plant in the greenhouse. /gríynhaws/

Jack lives in a green house. /gríyn + hàws/

In written matter, spacing gives a valuable signal in addition to the context clue. In oral usage, a different type of signal must be recognized. This signal involves contrast in juncture (break in speech) and in stress.

Likewise, the only way to distinguish between these two sentences in speech is the stress and juncture pattern:

A little *blackbird* is on the roof. /blǽkbərd/
(one stress, no juncture)

A little *black* *bird* is on the roof. /blǽk + bə̀rd/
(added stress, open juncture)

A similar contrast occurs in the following example:

There were *altogether*, /ɔ́ltəgeðər/ too many parties.

The director brought us *all together*. /ɔ́l + təgéðər/

In some words, a phoneme changes as well as stress and juncture:[15]

A *gentleman* /jentəlmən/ helped the old lady.

A gentle man /jentəl + mæn/ helped the old lady.

Children have heard, and probably have used, these signals over and over before they came to school. If they have heard them correctly used, they are likely to be using them correctly themselves. The teacher can prevent or clear up confusion over a compound and its corresponding phrase by letting the child hear himself and others say the words in context. The oral signals, stress, and juncture will be detected. After the child is conscious of the difference, for example between *setup* and *set up*, he is able to apply this same stress pattern to other ambiguous pairs.

Teachers should note that compounds keep this same stress pattern, regardless of the context. In other words, it is worth teaching that the first syllable of the compound is usually accented.

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[15] Bernard Block and George L. Trager, *Outline of Linguistic Analysis* (Baltimore: Linguistic Society of America, 1942), pp. 66-67.

SUMMARY

In this chapter, a body of morphological data has been presented along with specific examples which relate to teaching language arts, including reading. There has been no attempt to exhaustively treat either morphology or reading instruction. The purpose has been to relate and expand the areas of both fields to merge them for the improvement of reading instruction.

The final section of the chapter is devoted to a summary of the significance morphology has for reading.

Improvement of Instruction Through a Knowledge of Morphology

The classroom teacher may ask what the mastery of morphological principles has to offer her teaching. This is a logical question from one who must justify the use of her study and planning time. The writers feel that a scientific knowledge of words gives the teacher the following advantages:

Concept of irregularity. The morphologist distinguishes between spelling irregularities and sound irregularities. The classroom teacher can benefit from this distinction. For example, child and children represent a genuine morphological irregularity which must be learned as an exception to plural patterns. On the other hand, baby and babies simply represent a spelling irregularity and the sound pattern is not violated. The clarification of this distinction lends accuracy to the teacher's handling of patterns and their exceptions.

Flexibility of approach. The more the teacher knows about the behavior of words in oral and written language, the less dependent she will be on prepared materials which may or may not suit the needs of her students.

Accurate diagnosis of difficulties. It is not easy to discover why a child continues to mispronounce or fails to pronounce, a certain word. All available information the teacher can obtain about sound patterns, word function, intonation, ambiguity, etc. is likely to partially reveal the source of difficulties. This knowledge gives the teacher a new dimension to analyze the child's handling of the language.

Morphological Implications for Instruction

Though the morphologist does not prescribe teaching procedures, his observations of the way language works provide implications for language arts instruction. The following suggestions, implied earlier, are ideas the teacher should keep in mind while guiding children in reading the language.

Let patterns be discovered by the learner. A group of morphological principles, such as those mentioned in this paper, are not to be presented to children as a list of rules for reading, speaking, and writing. Rather, insofar as possible, the child should be led to make his own generalizations about the behavior of the language with which he is dealing.

Use meaningful units in word analysis. If reading is to be communication, then the emphasis should be on comprehension. This is not to say that there is no place for syllabication. It is to say that the analysis of words by syllables is not the most effective method of meaningful attack.

Syllabication often does not correspond to dividing the word into its meaningful components.

Example: The thermometer is broken.

A typical syllabic analysis of thermometer would divide it into four syllables: ther mom e ter. This can possibly clarify its pronunciation, but the meaning is jeopardized in the process. A more meaningful division would be thermo meter. Both parts are morphemes, and convey meaning to the reader in either combination as well as thermodynamic chronometer. The habit of searching for meaningful units in unfamiliar words will be a valuable asset to any reader.

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CHAPTER III

SYNTAX IN READING INSTRUCTION

Sara Ann Broome, Irene Carter, Carroll Green,
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INTRODUCTION

Information gained from the structural linguists has impressed many reading authorities with the importance of syntax as it conveys meanings or makes possible the derivation of meaning from written material.

Ruth Strang suggests:

> A knowledge of the basic sounds and distinctive features of the ways in which thought is communicated and meanings signaled by stress and structure--should contribute to our reading. Without throwing aside our present methods of teaching reading, verified by experience and experiment, we should increase our competence by considering the complex reading process.[1]

The importance of an understanding of the language is further emphasized by Robert C. Pooley as he says:

> A communication is governed not only by the meaning of the words used but also the intention or purpose of the communication, plus the emotional drive which gives a tone to the communication. A reader so trained can

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[1] The Reading Development Center, *Contributions of Linguistics to Reading: A Symposium* (Tuscon, Arizona: The Reading Development Center, University of Arizona, 1963), p. 2.

> interpret communication with an insight far more penetrating than one untrained.[2]

Reading involves recognition of symbolic structures which are intended to stimulate meaningful reaction.

Syntax is the branch of linguistics concerned with organized patterns of speech. Within the speech patterns numerous elements are included. Elements such as pitch, juncture, stress, word form, and word order compose the syntax of the language. These elements combined in various forms or patterns make up what is commonly called the sentence. Variations of sentence patterns are achieved through intonations and endless expansions or substitutions.

The native speaker learns to react to various syntactical patterns and to formulate patterns of his own in order to provide desired reactions. There may be implications for reading instruction in this fact. The child can be led to realize that the printed symbols form patterns which are similar to those he uses in his speech. This in turn should help him to construct the author's intended meaning as he is stimulated by the symbols.

INTONATION

Awareness of intonation as an aid to comprehension is relatively recent, yet intonation underlies the entire language structure. Linguists suggest that intonation may well be a decisive factor in teaching children to read and write effectively.

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[2] Robert C. Pooley, "Reading and the Language Arts," Development in and Through Reading (Chicago: The University of Chicago Press, 1961), p. 39.

"Intonation is the generic term for significant and distinctive patterns of pitch, stress and juncture."[3] Though intonation is intuitively used by the native speaker, it is perhaps the least understood signaling system of American English.

In connected speech the voice pitch is continually rising and falling. Though speakers of American English may use many variations, they fall into a few basic patterns. These variations may be described at *melodies*, *tunes*, *patterns*, or *contours*. Four conversational degrees of pitch are: extra high (two steps above the usual voice level), high (one step above the usual voice level), mid (normal), and low (one step below usual voice level).[4] These degrees of pitch may be indicated from lowest to highest by the numerals 1, 2, 3, 4. One soon comes to recognize the 2-3-1 pattern as the pitch pattern of the declarative sentence, the 2-3 pattern as that of the interrogative, and the 2-1 pattern as the pattern for exclamation. Examples:

1. (declarative) ^{2}Tom + ^{3}went + swimming^{1} ↓
2. (interrogative) ^{2}Are + you + ^{3}leaving ↓

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[3] Carl A. Lefevre, *Linguistics and the Teaching of Reading* (New York: McGraw-Hill Book Company, 1964), p. xvi.

[4] Cynthia D. Buchannan, *A Programmed Introduction to Linguistics: Phonetics and Phonemics* (Boston: D. C. Heath and Company, 1965), p. 253.

3. (exclamatory) ^{3}Help me^1↓

There are four contrasting degrees of stress in American English usually differentiated by linguists as primary, secondary, tertiary, and weak. These are indicated by the following phonemic symbols: /´/ primary stress, /^/ secondary stress, /`/ tertiary stress, and /˘/ weak stress.

Examples:

1. Tôm + càn + swím
2. Thĕ + bôy + ĭs + hìttĭng + thĕ + báll

Juncture is a "break in the flow of sound."[5] The four degrees of juncture are indicated by /+/, /↑/, /↓/, and /→/. A juncture which occurs within an utterance is called internal open juncture and is indicated by the symbol /+/. An example of meaning contrasts through use of internal open juncture is the familiar children's refrain:

I + scream, you + scream, we all + scream for Ice + cream.

Another example is a child's humorous reply to the question, "Who did that?"

Pop-Eye + did + it for Pop + I + did + it

The type of juncture that has neither rise nor fall in voice pitch is called sustained juncture. Sustained juncture is represented by /→/.

Examples:

The boy ran → jumped → shouted

Tom left →

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[5] Ibid., p. 240.

Terminal juncture where the voice rises sharply at the end of a sentence usually denotes a question and is indicated by the symbol /↑/.

Example:

Are + you + there + Sara ↑

Terminal juncture where the voice pitch falls at the end of an utterance frequently indicates statements and questions using question markers.[6] This juncture is indicated by the symbol /↓/.

Examples:

1. (statement) She + is + not + here ↓
2. (question) Where + are + you + going ↓

The three elements of pitch, stress, and juncture can be easily understood or heard in a few simple contrasting examples:

1. (statement) ^{2}Shê + ^{3}ràn + ^{1}awáy ↓
2. (question) ^{2}Shê + ^{3}ràn + ^{3}awáy ↑
3. (unfinished) ^{2}Shê + ^{4}ràn + ^{1}awáy ⟶

In written language punctuation marks are used to signal how sentences will sound in the mind of the reader if he reads silently, or how he is to speak if he reads orally. The child entering school is unaware of these signals in relation to graphic symbols. In other words, the child must learn to associate punctuation with the melody or intonation pattern if he is to read in a meaningful way. According to Lefevre the best method to develop this consciousness is to practice speaking and reading the familiar patterns with emphasis on natural or native intonations.

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[6] An explanation of question markers is discussed later in this chapter.

Teachers may use the existing basal readers more effectively by developing more natural sentence melody into the sentences. This can be done by asking children to assume parts and read only the sentences in direct quotations. After children have acted out the scene, they may be shown the difference that natural emphasis can have on some of the structure words.[7]

To make children even more aware of sentence melody the teacher can supplement the reading material she normally uses. A simple method may be to write the same sentence on the board several times:

1. Mother is cooking dinner.
2. Mother is cooking dinner.
3. Mother is cooking dinner.
4. Mother is cooking dinner.

The underlined word is to be heavily stressed. Such exercises not only make the child aware of sentence melody but also illustrate the change that emphasis imposes on different words in the sentence. Children may also be encouraged to construct their own sentences similar to the above. In addition they could be made aware of the force of final punctuation and its significance. It may also be beneficial to record children's conversations and to transcribe and read aloud such conversations.

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[7] Structure words are discussed later in this chapter.

Dramatic interpretation should not be overemphasized in the elementary school. The significant contribution of intonation in teaching reading is to enable the child to see the melodies that he hears and to realize that they are important signaling systems that shape our units of communication.[8]

LINGUISTICS RELATIONSHIP TO TRADITIONAL GRAMMAR

Speech and writing patterns are different in many ways, but they are closely and systematically alike. The language system is a totality; we hear it, speak it, and respond to it all of a piece and all at once. The aim of reading instruction is to approximate this totality.

"In reading, just as in speech and oral reading, word order provides one of the most reliable clues to the total meaning-bearing pattern. Basic American English word order is quite rigid and arbitrary."[9] There are possibly no more than four important sentence patterns. Variety is achieved through infinite possibilities of expansion, substitution, inversion, and transformation of these important patterns.

In the English language the word or morpheme is an unstable element, whether it is taken as a semantic or a structural unit. Because of its instability, one must examine the various patternings of morphemes into larger structural units called syntax. Most children are quite familiar with these patterns upon entering school and already use them. Therefore, giving the child a conscious knowledge of the patterns they have mastered through speech should be an important part of the beginning program of comprehension skills.[10]

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[8] Martin Steven, "Intonations in the Teaching of Reading," Elementary English, XLII (March, 1965), 236-237.

[9] Lefevre, *op. cit.*, p. 79.

But how can a five or six-year old child master the problems which seem hopelessly complicated to many students of English grammar even in college? He cannot, of course, if the teacher insists upon introducing these patterns, or meaningful word groups, on the level of formal traditional English grammar. Linguists offer some practical suggestions to assist the teacher.

Linguists agree that words fall into two basic types. The words which identify the actual experiences to which they apply such as _horse_, _dog_, _tree_; or _fly_, _jump_, _speak_; or _soft_, _clean_, _honest_; or _quickly_, _later_, _roughly_ are referred to by Lefevre as "full"[11] words, or technically as words with lexical meanings. The other words, structure words, are used instead as structural signals in sentence patterns. In this group there are such words as _the_, _shall_, _and_.[12] Lefevre calls these

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[10] _Ibid_., p. 80.

[11] _Ibid_., p. xvi.

[12] Charles C. Fries, _The Structure of English_ (New York: Harcourt, Brace and World, Inc., 1952), p. 106.

"empty"[13] words.

Fries categorizes full words into four major classes in The Structure of English. These four classes can be roughly identified as nouns, verbs, adjectives, and adverbs. They can be discovered through their use in sentences rather than through formal definitions.

For identifying words used as nouns, a simple sentence or frame may be used:

The boy was good.[14]

Then the child can try to find other words which could be used to replace boy such as:

The dog was good.
The man was good.
The food was good.
The book was good.

Each of the words which he substitutes acts like a noun because it fills the noun function in the normal word order in our American English sentence.[15]

When creating frames in which it would be possible to place almost any noun, it is necessary to exercise judgment. Many frames would limit the substitutions possible. For example in The girl was pretty it would be unsuitable to substitute The boy was pretty or The man was pretty. When children are experimenting with sentences, it is not necessary to be so cautious; but if a frame is being used to define the noun group one must select frames carefully. Such is also the case when choosing frames to define each of the classes. For discovering words which function as verbs, sentences such as the following could be used:

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[13] Lefevre, op. cit., p. xvi.

[14] Fries, op. cit., p. 76.

[15] Lefevre, op. cit., p. 86.

She stopped it.
They came here.

Here at least two frames must be used as all verbs could not fit into any single frame. The child then plays with such substitutions as:

She hit it.
She washed it.
She sent it.
She used it.
They lived here.
They were here.
They met here.
They slept here.

As the children make noun and verb substitutions, the problem of noun and verb agreement will arise. Some child might attempt the following substitution:

The boy was good.
The children was good.

Many children will agree that this "doesn't sound right." When asked to make it "sound right" someone would probably say:

The children were good.

The necessity of this "tie" between the subject and some forms of the verb can be shown by use of similar frames. Through this type of work the stage will be set for later introduction of more formal grammatical terms. For early practice we can use such frames as:

They *were* here.

He *was* here.

They *are* here.

She *is* here.

The noun group and verb group form the basic structure of the sentence. The two remaining classes, adjectives and adverbs, may or may not occur in sentence patterns. When they occur they may act either to complete the pattern, "pattern completers,"[16] or to expand a part of it.

The simplest frame which the children can use to discover *adjectives* might be something like the following:

The *good* one is here.

And he might substitute as follows:

The *bad* one is here.

The *empty* one is here.

The *best* one is here.

The *lower* one is here.

For the *adverb* class he could use something such as:

He found it *here*.

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[16] *Ibid*., p. 82.

He went *suddenly*.

Substitutions might be:

He found it *upstairs*.
He found it *outside*.
He went *later*.
He went *eagerly*.

The teacher of very young children would not be concerned with breaking a sentence pattern into individual word parts. The value of using the method suggested by Fries for reading preparation is to recognize word groups which fulfill a meaningful function in a sentence. These are heard naturally through intonation and juncture in speech. But in reading, word order is a vital clue to meaningful word groups within larger meaningful patterns.

For this reason children can discover that not only single words, but also groups of words can fulfill a class function in larger sentence patterns. For example:

The *boys* were chosen.
The *boys*, *men*, *and* *some* *women* were chosen.

The whole phrase, *boys*, *men*, *and* *some* *women*, fulfills the same function in the second sentence that was filled by the single word *boys* in the first.

They *went* home.
They *were* *being* *taken* home.

Here the phrase, *were* *being* *taken*, in the second sentence fulfills the same function as the single word *went* in the first.

They came *later*.

They came *the day after John arrived at our house*. In the first sentence the word later completes the pattern by telling when someone arrived. But in the second sentence this function requires the whole phrase, *the day after John arrived at our house*.

The *good* boy went home.

The boy *who was so pleasant and friendly* went home. The phrase, *who was so pleasant and friendly*, tells about the boy just as the single word good does. The position of the relative clause changes to that the example shown uses meaning rather than word order as the basis of comparison.

A similar example would be:

The boy *in the house* went home.

The boy *there* went home.

The adverb *there* replaces the adjectival phrase *in the house*. Since technical linguistic analysis of such differences would be too difficult to explain, meaning should be the basis for comparison. Finally the child's intuition as a native speaker of American English should aid understanding. The beginner must be taken where he is. Many examples of the various patterns are needed as his speaking and reading vocabularies grow. At later stages, technical linguistic explanations and traditional grammar labels may be introduced as they are useful. By this time the child will have a sound basis for discovering inductively their place in the grammar system.

Breaking phrases incorrectly can lead to comprehension difficulties. If the child reads the following sentence using two different intonations, he will arrive at two completely different meanings.

Example 1:

Traditional punctuation.

They came the day after John arrived at our house.

Transcription of intonation.

They came —— the day after John arrived at our house.

Example 2:

Traditional punctuation.

They came. The day after John arrived at our house.

Transcription of intonation.

They came the day after —— John arrived at our house.

Recognition of a phrase[17] used as a whole group or thought in a sentence is vital to comprehension, but how can the child find these phrases? It is for this purpose that structure words are essential. These words are used as signals for basic functions within the sentence pattern. Their specific characteristics and uses follow in the next section.

STRUCTURE WORDS

Understanding the systematic structuring of word groups seemingly is of more significance to teaching reading and writing than study of single words. If the teacher is to avoid producing word callers which could lead to word-by-word reading, then she should not teach the child to read single words. Single words are not in themselves significant carriers of meaning. Meaning comes only as single words are related to other words in the sentence structure.

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[17] Recognition of a phrase here refers to building thought patterns as a child reads, not to visual span of recognition.

As previously mentioned, some words can be given rather clear lexical meaning while other words can be given very little, if any. The words with little meaning except as signals of the structure of sentence patterns have been referred to as structure words or empty words. (Fries calls these words function words.)

Structure words are used to show relationships among parts of sentences. Although they have mainly structural meaning and are relatively few in number, they are among the most frequently used words in the English language. They are so important for reading comprehension that the misreading of just one may very well change the meaning of the entire sentence.

Of the total number of words in our English language, there are only some three hundred structure words. They include ten sets which include six markers, the conjunctions, and several smaller sets such as the negatives and the introductory there.

The most important structure words used in basic reading instruction are the six sets of markers. The word marker is easily understood by young children and should be introduced on the primary level. The following is a list of the ten sets of structure words and a few examples of each set.

Structure Words	Examples	Traditional Names
1. Noun Markers	a, the, this, his	Articles, Demonstratives, Possessives, etc.
2. Verb Markers	is, was, may, can, etc.	Auxiliary Verbs
3. Adjective-Adverb Markers	very, too, most, etc.	Adverbs, sometimes called Intensifiers
4. Question Markers	who, what, when, etc.	Interrogatives (Pronouns, Adjectives, Adverbs)
5. Phrase Markers	up, by, under, etc.	Prepositions
6. Clause Markers	because, if, while, etc.	Subordinating Conjunctions
7. Levelers	or, and, etc.	Coordinating Conjunctions
8. Negatives	not, never, etc.	Negative Adverbs
9. Starters	there, well, oh, etc.	Adverbs, Interjections, etc.
10. Proposers	please, let's, etc.	Special verb forms

These words have traditionally been taught as sight words, and traditional grammar has also tended to explain them in isolation. However, the structure words should never be taught in isolation, but only as they function in our language. A marked improvement in reading and writing skills should result if children learn structure words in relation to the words which they signal.

In basic reading instruction, children should be taught to recognize noun markers as such and to read them in noun groups. They should be taught that the noun marker points to a noun. It is a structure word that must be followed by a noun. *The boy ran*. In this sentence *the* points to the noun *boy*. When the child sees *the* he knows it will be followed by a noun. *The boy ran* can be expanded to *The frightened boy ran*, *The very frightened boy ran*, or *The boy next door ran*. Everything between the marker and the noun is called the noun group. The noun itself is the *head* of this group.

Just as the child learns that a noun marker points to a noun, he should learn that certain words are verb markers. These verb markers signal the verbs that are to follow. Verb groups work as a unit in the sentence and should be understood as a unit and read as a unit within a larger meaning-bearing pattern. The *most* common verb markers used in elementary teaching are the forms of *be*, *have*, and *do*. There are eight forms of the verb *be*: *be*, *am*, *are*, *is*, *was*, *were*, and *being*. There are five forms of the verb *do*: *do*, *does*, *did*, *doing*, *done*. There are four forms of the verb *have*: *have*, *has*, *had*, and *having*.

In the sentence *John was playing*, the child should learn to recognize the word *was* as a verb marker and understand from this that the verb will follow. This sentence can be expanded to include a verb group. *John was to have been playing in the yard*. *Was* still functions as a verb marker. This time it signals a verb group with *playing* as the *head* of the group.

The third set of markers is comprised of the adjective-adverb markers, also referred to as intensifiers because they often express intense feelings. Intensifiers are used before both adjectives and adverbs: more intense, less hard, for example. Very often endings are used to bring about the same change in meaning as the above mentioned: bigger, hardest, for example.[18] Some of the most commonly used intensifiers are very, more, most, little, less, least, quite, awfully, really, real, any, pretty, too, fairly, rather, somewhat, somehow, right, just, more or less so.[19]

Question markers are also frequent in the young child's speech. They are few in number and easily learned on the primary level of instruction.

Phrase markers are important to the teaching of reading because they are so common. The instruction would be the same as that for the noun and verb markers. Certain structure words such as up, under, between, and over introduce a noun phrase. The basic pattern is simple: under the ground; between the seats. Although they may be used occasionally as complete sentences (as In the house, in answer to Where's your brother?), they should be taught as sentence elements.

To understand clause markers, one must first be able to differentiate between a phrase and a clause. Lefevre points this out in the following definition:

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[18] Refer to Chapter II for explanation of word endings.

[19] Lefevre, op. cit., p. 133.

> A clause is a word group with a N V pattern as its basic structure; this N V pattern, of course, is chiefly what differentiates a clause from a phrase. Clause markers are a set of words that have been given a bewildering and inconsistent set of names in traditional grammar: "subordinating conjunction," "relative pronoun," "conjunctive adverb," or "adverbial conjunction," "introductory adverb," "illative conjunction," and the like. In general, a clause begins with a marker (a single word or a word group) signaling that a clause is about to unfold.[20]

The clause marker is probably the most important marker the child will learn. He must learn to use these markers by instinct if he is to develop effective comprehension of meaning. Young children are already familiar with simple clause markers in speech. It is far more important to teach the child the use of these clause markers than to teach him a large vocabulary of full words. Examples are as follows:

1. The pie is better when you add ice cream.
2. He left after the bell rang.
3. The man whom I saw was very tall.
4. The man I saw was very tall.

Example number four shows that a clause marker is not always used in colloquial speech.

Levelers are structure words serving as joints or connectors between similar structures. They may connect single words or groups of words with the same function. The following sentences are examples: (1) The cookies and the candy were good. (2) He is at home or in his store. In the first sentence and connects class I words or nouns. In the second sentence or connects two prepositional phrases.

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[20] Ibid., pp. 127-128.

There are other structure words which do not fit into any of these sets. They can be more clearly shown through practical examples.

Type

Negative -- not -- The movie was not good.

Starter -- there -- There are books on the subject.

Proposer -- please -- Please give me your address.

All of these structure words will be included in the basic structure patterns which are explained next.

BASIC SENTENCE PATTERNS

The main basic patterns which constitute sentences in American English can be discovered by observing the basic parts, their boundaries, and their positions in relation to each other. A countless variety of such sentences can be formed from a few "kernel sentences."[21]

Each sentence constitutes a structural matrix consisting of one or more structural layers. The meaning of the utterance is obtained from the pattern. For example, dogs run fast contains three words in an order which gives certain information about their meanings and relationships to each other. Each of these words could be given a different component of meaning by a different place in the sentence pattern. The first (dogs) could be an object in such as *boys like dogs*. The second (run) could be a noun in *scored a run*. The third (fast) could be an adjective as in *a fast train*.[22]

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[21] Carl A. Lefevre, "The Contribution of Linguistics," The Instructor, LXXIV (March, 1965), 103.

A knowledge of these patterns can be of help to both teacher and pupil in developing reading comprehension.[23] There is an order that is followed. For example: *The girl likes the kitten* is a simple pattern of subject--verb--object. The order is rigid. If a single word is moved, the sentence becomes nonsense, *girl the likes kitten the*, or changes its meaning, *the kitten likes the girl*. However, it can be expanded with adjectives--*the little girl*, *the very pretty girl*, or *the very pretty little girl in the blue dress who lives down the street*. In order for the pupil to develop reading comprehension, he must perceive that *the girl* and *the very pretty little girl in the blue dress who lives down the street* are both in the same position. Similarly, the verb part *likes* and the object (or second noun part), *the kitten*, can be expanded with modifiers, phrases, and/or clauses.

According to Lefevre, the following formulas (or frames) are the basic patterns. The capital letters used stand for parts of sentences, not parts of speech: N stands for Noun or

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[22] Sumner Ives, "Some Notes on Syntax and Meaning," *The Reading Teacher*, XVIII (December, 1964), 179.

[23] Lefevre, *op. cit.*, p. 104.

Pronoun Part; V, Verb Part; A, Adjective Completer; Ad, Adverb Completer. After the Verb Part, N means Noun (complement, direct object, indirect object, and/or object complement); Lv, Linking Verb.[24]

Four Basic Sentence Patterns with Sub-Patterns

Pattern One

N V	Dale walked.
N V Ad	Dale walked slowly.

Pattern Two

N V N	Dale hit Roy.

Pattern Three

N V N N	Dale gave Roy a toy.
N V N N	The club elected Dale chairman.
N V N A	Dale made Nellie happy.

Pattern Four

N Lv N	Dale is a boy.
N Lv A	Dale is funny.
N Lv Ad	Dale is there.

The following are inversions, including patterns using there and it:

Pattern One

A V N	Happy are we.
Ad V N (v)	Seldom does she come.

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[24] Ibid., p. 84 ff.

There V N	There come the books.
It V N	It rained last night.[25]

Pattern Four

A Lv N	Smartest was Jim.
Ad Lv N	Rarely was she there.
There Lv N	There was a bird.

Common Passive Transformations

A transformation has been defined by the Nebraska Curriculum Development Center as "a systematic shifting of the parts of the phrase-structure patterns. Examples are the transformation for passive voice, of verb particles, for negation, of stress-bearing auxiliary verbs, and for various questions."[26] Passive transformation is not possible for Pattern One. In the following formulas or frames *v* represents a form of *be* as the passive verb form.

Pattern Two

N vV by N	Roy was hit by Dale.

Pattern Three

N vV N by N	Roy was given a toy by Dale.
N vV N	Irene was given flowers.
N vV N by N	Dale was elected chairman by the club.
N vV N	He was elected captain.

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[25] *It* and *there* are examples of *starters* mentioned earlier.

[26] Nebraska Curriculum Development Center, *A Curriculum for English: Language Explorations for Elementary Grades* (University of Nebraska, 1965), p. 92.

N vV A by N	Jewell was made happy by Jean.
N vV A	Jewell was made happy.
It vV A N	It was considered an appropriate message.

Such sentence patterns as *Dale walked* do not occur often in ordinary writing and speaking. They should, therefore, be used in reading instruction to introduce the more common variations such as *Dale is walking*, which uses a verb group instead of the simple verb form. A pupil reads for comprehension and the pupil who misses the total sentence pattern will miss the meaning as well.

Pattern Variations

Questions, commands, and requests are generally thought of as structural variants of the common basic statements.[27] The following are inversions of the formulas (or frames) for questions:

Pattern		Inversions	
N Lv	We are.	Lv N	Are we?
N V	I have.	V N	Have I?
N V	Bob ran.	v N V	Did Bob run?
N V N	Dale drinks milk.	v N V N	Does Dale drink milk?
N V NN	Dale gave Tramp a bone.	v N V N N	Does Dale give Tramp a bone?
N Lv A	Sara looks nice.	v N Lv A	Does Sara look nice?

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[27] Carl A. Lefevre, *Linguistics and the Teaching of Reading* (New York: McGraw-Hill Book Company, 1964), p. 97.

Pattern		Inversion	
N Lv N	Tramp is a puppy.	Lv N N	Is Tramp a puppy?
N Lv A	Jane is sweet.	Lv N A	Is Jane sweet?
N Lv Ad	Bob is away.	Lv N Ad	Is Bob away?

Patterns of Requests and Commands

Requests and commands usually begin with the base form of the verb. The patterns are distinguished by the use of the proposer please and its variations in a request and by the tone of voice. Here intonation plays a particularly important part. Quite often it has been stated, "It is not what you say but how you say it." Presented here are several variations.

Requests	Commands
Please clean off your desk.	Clean off your desk.
Will you please clean off your desk?	
Please come.	Come.
Will you sit down, please?	Will you sit down?
May I have the book?	Bring me the book.
Please be careful.	Be careful.

DEVELOPING SENTENCE SENSE THROUGH SYNTAX

The reading teacher who has knowledge of syntactical influence upon meaning will train the child to be in command of communication as he gives and receives it. In this paper, command of communication shall be called sentence sense. The teacher should develop sentence sense in pupils from the day they enter school through the use of the discoveries of structural linguistics.

Lefevre states:

> Sentences in sequence within larger graphic structures (such as the paragraph) build up interrelationships into more complex meaning-bearing structures. In reading, the learner must grasp these meaning-bearing structures as wholes in order to comprehend meaning. Sentences are the basic building blocks of meaning: Comprehension begins with sentence comprehension.[28]

Developing Language Fluency as a Part of Sentence Sense

The first step in producing sentence sense should be development of language fluency. Linguists feel that knowledge of the way language works offers a real contribution to reading. At an early age the child can be made aware of the patterns in his speech. He will soon realize that he uses words in a certain manner to get the responses he desires and that people all around him use those patterns in their speech. Teachers should be conscious themselves of the structure of the language.

Linguists believe that the child learns the patterns of his language through listening and comes to use those patterns he hears. After some research on children's speaking patterns, Ruth Strang and Mary Elsa Hocker report:

> . . . some patterns are used much more often than others. The frequency trend moves from the simple to the more complex, an indication of the developmental nature of sentence patterns. From a very few basic sentence patterns a child may evolve many variations. It is not the patterns *per se*, but what is done to achieve flexibility within the pattern that

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[28] *Ibid.*, p. 81.

> is important for language development. *Systematically introducing the child to these basic sentence patterns in his oral language would facilitate his beginning reading development.*[29]

Many children have some proficiency in listening. Others have to learn to listen. The teacher must use many experiences to build and/or refine listening ability and then lead the child into fluent speech patterns as a basis for meaningful reading later. The teacher must be aware of those children who need development in this area and do everything possible to bring them into fluent speech. The teacher must set examples of pitch, stress, and juncture, as well as develop the children's skill in use of them. The teacher must see that every child becomes involved and is producing fluent sentences.

A basic purpose for promoting sentence fluency is to help children understand "that word order provides one of the most reliable clues to the total meaning-bearing pattern."[30] This they then will seek to find meaning in what they read. They will also have a technique for extracting the meaning.

Many linguists say there are four basic sentence patterns. Three of these occur most commonly in speech. The three dominant patterns are the NV, N Lv N, and NVN. The teacher and children may manipulate these patterns by inversion, expansion, and substitution to attain other sentences.

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[29] Ruth Strang and Mary Elsa Hocker, "First Grade Children's Language Patterns," *Elementary English*, XLII (January, 1965), 38-41.

[30] Lefevre, *op. cit.*, p. 79.

The primary teacher can find many ways to develop the basic N V (noun part, verb part) sentence pattern. The child will find enjoyment in expansion, substitution, and inversion of this basic pattern. For instance, children can play a game involving expansion such as:

(N V) Mother works.

(Same with) Mother is working.

(V expanded) Mother is working for me.

(Same with) Mother is working hard (quickly, late).

(Both N and V expanded) My mother is working in town.

Now an inversion which shows the question:

Does (Did) Mother work?

Is mother working?

Is mother working for me?

Is my Mother working in town?

Then the teacher continues to build sentence sense through other patterns. The next pattern: N Lv N (noun part, linking verb, predicate nominative) may be developed in the same manner.

(N Lv N) I am a boy.

(Same with N expanded) I am a little boy.

I am a very (little, big) boy.

(Inversion) Am I a big boy?

A third basic pattern is the N V N (noun part, verb part, and the direct object as noun completer).

(N V N) Jane caught the ball.

(Same with V expanded)	Jane caught the ball quickly.
(Same with N expanded)	Jane caught the big red ball quickly.

Question markers naturally become involved in transformations, giving a head start on the troublesome "empty" words. Children easily learn to use and recognize inversion and question markers as signals for information. For example:

Who caught the ball?

Why did Jane catch the ball?

Did Jane catch the ball?

As teacher and pupils work with patterns of speech, language fluency reflecting sentence sense becomes a part of the children's understanding of language. Should some have difficulty in making this transfer, they should be given additional work to develop language fluency.

Specific Recommendations

(1) Linguists believe that the time spent in taking down children's stories in their own language for use as reading material is well justified. This technique makes more certain that the words and the ideas behind them have meaning for the children. Using children's sentence patterns and vocabulary in beginning reading theoretically would help to prevent failure and disillusionment.

(2) They further recommend that authors introduce basic linguistic patterns in beginners' books.

(3) Children must begin writing their own communications

as soon as possible. When patterns are the center of attention in leaning to communicate effectively, writing one's own ideas will naturally accompany reading. Materials that have been of utility to linguists can also help the teacher to develop children's writing ability. For example, the tape recorder could be useful for preserving stories until they can be written by the teacher, or at a later date by children themselves.

(4) The teacher can also read aloud to children. They could hear the melodies of the structural patterns at the same time their conceptual experiences and vocabularies were being enlarged.

(5) The child's natural expression should be encouraged and accepted as long as it carries meaning. As successful language arts experiences are cultivated, the child will be moved slowly into more formal patterns of language; that is, Standard English.

The recommendations which have been described should be continued throughout the primary grades. One rule of thumb is that a child should have many varied writing experiences in his school life.

Linguistic Knowledge Applied to Teaching Study Skills

It would appear that linguistic understanding could be a basis for experimentation in teaching certain study skills: paragraph building, locating the main idea and supporting ideas in paragraphs, and locating key words.

Paragraph Building Through Sentence Sense

One might use the noun part-verb part of sentence patterns to formulate an analogy which could apply to the structure of paragraphs. Thus, the topic sentence containing the main idea could be referred to as the noun part of a sentence and the supporting ideas could be referred to as the verb part.

In theory, a child who understands that a sentence has a noun-part and verb-part could easily transfer this knowledge to a larger organizational pattern, the paragraph.

Procedural steps could be:

(1) Oral manipulation of sentence patterns. Experimentation would be necessary to obtain the most effective topic sentence. The teacher would emphasize that for study purposes one could refer to the main idea as the noun part and the supporting ideas as the verb part of the paragraph.

(2) When children understand that paragraphs are built around the main idea, they are ready to build paragraphs of their own. At first they would plan together. The class would produce simple paragraphs which they would dictate to the teacher. She would write them on the board or on tag board. These paragraphs would then be read orally to hear the structural pattern. Each sentence should be examined to see if it fits into the topic of the paragraph.

(3) Soon they will be ready to write paragraphs independently. These paragraphs should be shared with the

other class members. Silent reading, oral reading, or a combination of the two may be used.

(4) Reading and writing continues with a gradual rise in level of vocabulary, expansion, substitution, and inversion of the basic sentence patterns. As syntactical knowledge increases, the child's effectiveness in language arts increases. When listening, speaking, reading, and writing experiences are built upon syntactical understanding, each area reinforces the others.

Use of Sentence Sense for Extracting Main Ideas

Toward the end of the third grade and throughout the intermediate grades the pupil is asked to extract meaning from content material. Many children have trouble getting main ideas from paragraphs and in outlining material because they are not alert to sentence sense. Sentence sense offers a tool for extracting meaning from material.

First, children must learn to look into sentence structure for meaning. They expect to find and therefore seek a noun part and a verb part for the paragraph. In that way they find the main idea of the paragraph.

Next, they look at each sentence for its noun part and its verb part. They know that other words in the sentence are expansions of the noun and verb parts. They allow the flow of modifying forms to convey the intended meaning. The basic understanding of sentence structure prevents them from getting lost in a maze of words.

The teacher must select the initial material with great care. Basal reading material seemingly does conveniently adapt to paragraph exercises, probably because of its narrative style. On the other hand, materials from special and natural sciences demand syntactical understanding.

Contrast, for instance, the following sentence patterns: (a) narrative style from a fifth grade basal reader, (b) content material from fifth grade social studies text:

> (a) A deep rumble of thunder died away in the distance. The lights in the second story of the old building flickered and then went off.[31]
>
> (b) When all the good trees had been cut from one section of forest, the lumber companies moved on. Lumbering was very wasteful in those days.[32]
>
> As the trees were cut, farmers moved into the cleared lands. Lumber companies had no use for the cleared land.[33]

Sample (a) contains simple sentence patterns in which the nouns and verbs are modified to some degree. Sample (b) is of a more complex nature because the sentence patterns are more involved than those of descriptive narration. They include structure words such as "when" and "or." They also include such morphological changes as "ing" and "ful."

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[31] William S. Gray, Marion Monroe, A. Sterl Artley, May Hill Arbuthnot, Days and Deeds (Chicago: Scott, Foresman and Company, 1962), p. 210.

[32] Emlyn D. Jones, J. Warren Mystrom, Helen Harter, Within Our Borders (Chicago: Rand, McNally and Company, 1962), p. 192.

[33] Ibid., p. 193.

Unless children have been trained to recognize complex sentence patterns, they may have trouble finding the main idea and supporting details in paragraphs of content material.

Application of the N V Structural Analysis of the Paragraph to Get the Main Idea and Supporting Details

The first exercise preparatory to teaching outlining is finding the main idea in a paragraph. Carefully written paragraphs having the topic sentence at the beginning should be used at first. Then practice may be given with paragraphs having the main idea expressed within the paragraph or at the end.

The teacher will set a pattern of procedure on the board. The following style could be followed:

The teacher writes on the blackboards

N	V

The children read the topic sentence for the noun part and the verb part. They suggest the simplest phrasing of each part. The teacher writes the suggested phrases in place. Next, they proceed to analyze each sentence for its noun part and its verb part. They record the phrases below the topic summary in the following manner:

	N	V
1.		
2.		
3.		

The pupils then examine the sum of their sentence parts to see if they support the main idea. From this point they set up the conventional outline of a paragraph.

Title

I. Topic

    A. Sub-topic

Demonstration of the Process

> America is a land of workers. If we were to make a list of all the different kinds of jobs American people do, the list would be a very long one. People work with the land, the rivers, and the seas. They work with machines and with their minds. They are farmers, teachers, miners, mechanics, soldiers, cowboys, and doctors. In this great country of ours there is almost no end to the kinds of work its people can do.[34]

Topic Sentence	1.	America	is a land of workers
	2.	List of workers	would be long
	3.	People	work on land and water
	4.	People	use minds and machines
	5.	Kinds of workers	are farmers, teachers, miners, mechanics, soldiers, cowboys, and doctors
Summary Sentence	6.	No end to kinds of work	in this country
		America	has many kinds of workers

Outline

America's Workers

I. America has many kinds of workers

    A. Americans work

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[34] Theodore L. Harris, Mildred Creekmore, and Margaret Greenman, *Through Broad Fields* (Oklahoma City: The Economy Company, 1962), p. 78.

    1. On land
    2. On rivers and seas
  B. Americans use
    1. Their minds
    2. Machines
  C. Kinds of workers
    1. Farmers
    2. Teachers
    3. Miners
    4. Mechanics
    5. Soldiers
    6. Cowboys
    7. Doctors

The method has just been applied to a single paragraph written especially for children. The following paragraph from a college textbook in elementary education will demonstrate its general applicability.

> Children enter the first unit or grade when they are approximately six years old, perhaps after completing a year of kindergarten. They, their parents, and their teachers view the development of reading skill as a phenomenon that will occur soon after the children cross the school's magic threshold. Their expectations frequently turn to disillusionment. Similar expectations are confronted from level to level of the graded hierarchy. Failure by many children to come up to them may mean frustration for their teachers, disappointment for their parents, and for the children themselves, a loss of self-respect.[35]

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[35] John L. Goodland and Robert H. Anderson, The Nongraded Elementary School (New York: Harcourt, Brace and Company, 1959), p. 3.

	N	V
1.	Children	enter the first grade
2.	They, parents, teachers	view development of reading skill
3.	Expectations	turn to disillusionment
4.	Expectations	are confronted from level to level
5.	Failure by children	means frustration, disappointment, etc.
	Expectations of children, their parents and teachers concerning development of reading skill	result in disillusionment for all of them

The final sentence (5) proves to be the topic sentence.

Steps in the Procedure of Paragraph Analysis When the Topic Sentence Is Not Apparent

1. Read the beginning sentence. Is it a topic sentence? What idea does it contain which may be useful in finding the main idea?
2. Read the entire paragraph. What is the main idea? If it is not yet apparent, list the N V parts of each sentence.
3. Now what is the main idea? How shall the N V be expressed? List the tentative suggestions. Decide on the best.
4. Establish details by sentence analysis.

Using Sentence Structure to Find Key Words

Children who have used sentence patterns as a part of reading for meaning, as a technique for effective writing, as a means of finding main ideas should have no trouble finding key words. They will know they should look for the noun part of the sentence and perhaps for other noun groups as supplementary key words.

SUMMARY

A continuous process of building language fluency and using sentence sense has been proposed as a part of the effective reading program. When children speak well and write well, their reading ability may be expected to be high. At all levels, emphasis has been placed upon the importance of each child expressing his ideas in written form.

It is believed that children will be able to read and write well if they understand syntax, morphology, and phonemic principles. All of these components are interwoven in the language arts. Mastery of their processes is the goal of all suggestions offered. Their basic understandings are not new. Application by means of suggested devices has been recommended in an organization which is intended to be an effective supplement to other techniques. It is the business of syntax to give meaning to reading, writing, speaking, and listening. Sentence sense permits reading with understanding and writing for effective communication.

CHAPTER IV

DIALECTOLOGY IN RELATION TO READING INSTRUCTION

Marjorie Jacks, Lil LaGarde, Midgett Schoolar,
Sister Iova Veitenhans

> And who in time knows whither we may vent
> The treasure of our tongue? To what strange shores
> This gain of our best glory shall be sent,
> To enrich unknowing nations with our stores?
> What world in the yet unformed Occident
> May come refined with the accents that are ours?
> Samuel Daniel (1562-1619)
> English poet and historian[1]

INTRODUCTION

What is this "treasure of our tongue"? Is it not LANGUAGE? Is it not language that the teacher must review in undertaking a study of dialectology and other areas of linguistics?

John P. Hughes has defined language as "a system of arbitrary vocal symbols by which thought is conveyed from one human being to another."[2] This change of ideas between people demands that the vehicle of communication must be an organized arrangement of speech elements and structures. Furthermore, since man is equipped with a built-in speech mechanism, it seems natural that he use this apparatus to transmit his ideas.

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[1] Lincoln Barnett, The Treasure of Our Tongue (New York: Alfred A. Knopf, 1964), p. 3.

[2] John P. Hughes, The Science of Language (New York: Random House, 1963), p. 6.

Symbolism also is an inherent part of both oral and written language. The *speech act* such as a command, *Come here*, is a signal eliciting either a positive or a negative *action response*.

By arbitrary decision words have come into the framework of the *speech community*. (Buchanan has defined a speech community as a given geographical area in which the culture is expressed by means of a common language.[3]) Thus, in the sense that it is passed on from the older to the younger members of the group, language is considered culturally inherited and thus arbitrary, as there is neither individual choice nor world agreement on the language to be used to communicate.

A simplified illustration of language-in-transition is found in the development of the contemporary Italian language. The speech forms of Latin gradually changed into three variations: Northern, Central, and Southern Italian. During the Middle Ages the Northern and Southern variations were so different that there was frequently no communication between the people of the two areas; however, both extremes were intelligible to a native of the Central region.

In the later Middle Ages, because of expanding trade throughout Italy, a common ground of communication was needed. It was logical, therefore, that the phonemes peculiar only to the Northern or to the Southern region were dropped and the phonemes peculiar to the Central region were assumed. Thus was born the modern Italian language.[4]

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[3] Cynthia D. Buchanan, *A Programmed Introduction to Linguistics: Phonetics and Phonemics* (Boston: D. C. Heath and Company, 1965), p. 9.

In the normal development of language the reverse appears to be the usual process--with the separate language or language variations evolving or breaking off from the parent system. It is believed that such language fission has been operating for centuries. Consequently, some scholars have proposed the hypothesis that such a process may be a clue to the true origin of language.[5]

DIALECTS

As has been pointed out, all people within a given speech community adhere sufficiently to the system of sounds and structure which makes up their language to be able to communicate with one another. This does not mean that all groups within any given speech community speak exactly alike. Variations in speech occur. These variations consist not only of pronunciations of words or groups of words (phonemic), but also of morphological and lexical differences. In the Midwest, hoarse and horse are homonyms, but generally in the South they are not. Which is correct, have drank or have drunk? It depends upon where you happen to live. Anyone in the South would know what an earthworm is; however, in the eastern states the same worm is likely to be known as a fish worm or an angle worm. Such speech variations are known as dialects.

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[4] Hughes, *op*. *cit*., pp. 23-25.

[5] *Ibid*., p. 30.

Linguistic science has pointed out the following features and nature of human language which should contribute to our understandings and appreciations of dialects:

1. All language is in a constant state of change and there is evidence of divided usage in some features of any language.

2. Changes cannot be considered accidental and lawless corruptions arising from the ignorance of the speakers. The changes have shown themselves to be regular and systematic--large patterns of change that have stretched over long periods of time. There has never been a golden age of "perfect language."

3. The stable features of a language are its sounds and grammar--not its vocabulary. The latter may easily be borrowed from the languages of other cultures a speech community encounters.

4. The only criterion of correctness in language is usage of the native speakers of the language. Linguistic history and geography have led to a much clearer understanding of the significance of dialectal differences in a language and of the bases for special prestige through which one regional dialect out of many becomes standard language.

5. Standard and literary are not the bases from which dialects diverge through mistakes or lawlessness and incomplete learnings. Rather standard language arises out of dialect. The grammatical forms of the uneducated are likely to be more conservative or older than those of the educated.[6]

Modern linguistics has its beginnings more than 150 years ago. It can be divided into three historical periods. The first 1820-1875, saw an exploration of the genetic relationships between languages, and historical linguistics was begun. Work on The Oxford English Dictionary was begun in 1858 but was not completed until 1928.

The second period of modern linguistic science extended from 1875 to 1925. This period saw the development of:

1. Phonetics (scientific analysis of speech sounds)
2. Linguistic geography
3. Recording and analysis of unwritten languages.

In 1925 Sapir's paper, Sound Patterns in Language, introduced the present period and the beginnings of structural linguistics.[7]

A Linguistic Atlas of the United States and Canada was originally a project of the American Council of Learned Societies and is historically connected with the National Council of Teachers of English. Between 1911 and 1917 the Council sponsored studies that showed that memorizing rules of grammar did not improve the student's ability to speak and write his language. The Council was greatly concerned about improving English instruction. Because of this concern they bore the expense of a meeting in Cleveland at which time a definite proposal for an American English atlas was formulated. (A linguistic atlas usually consists of maps that show graphically the dialects of the region being studied.)

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[6] Charles C. Fries, "Advances in Linguistics," Readings in Applied English Linguistics, ed. Harold B. Allen (New York: Appleton-Century-Crofts, 1964), pp. 39-41.

[7] Ibid., pp. 41-42.

The linguistic atlas project of the United States consists not of a single project but of a number of regional research projects using similar procedures and collecting the same kinds of evidence so that results can be compiled and compared.[8]

Kurath's linguistic atlas, A Word Geography of the Eastern United States, which was begun in 1931 and published in 1949, clearly reveals the direct relationship of a region's history to its dialect. The material which comprises the atlas was gathered from two carefully selected informants from each county: one--illiterate, the other--a person who had had the benefit of at least a grade school education. Most of the larger cities were represented by an additional person from a more cultured group.[9] This atlas has been an invaluable source of information for all persons seriously interested in dialectal differences. The data in the following paragraphs have been gleaned from this source.

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[8] Jean Malmstrom, "Linguistic Atlas Findings versus Textbook Pronouncements on Current American Usage," Readings in Applied English Linguistics, ed. Harold B. Allen (New York: Appleton-Century-Crofts, 1964), pp. 316-317.

[9] Hans Kurath, A Word Geography of the Eastern United States (Ann Arbor: University of Michigan Press, 1949), p. v.

The first English settlements in the United States consisted of a chain of geographically and politically separate colonies along the Atlantic Seaboard. Each colony had a life of its own and for several generations had closer ties with the mother country than with other colonies.

When the several colonies began to establish physical contact with one another, each must have possessed distinctive social and cultural characteristics, including a dialect of its own--a unique blend of British types of speech, supplemented in its vocabulary by borrowings from Indians, Dutch, or German neighbors. These regional types of American English spread inland as the settlements expanded up the rivers and across the mountains and took on a new flavor as they blended along the frontier.

In the South all elements of the population except the planter and the upper classes in the seaports lived in marked isolation. This fact is strikingly reflected to this day in the great local differences in the speech of those with limited education, both white and Negro. The speech of the planter class, on the other hand, was regional rather than local and relatively close to Standard British English because of the continuous contact with upper classes of English society during the Colonial Period.

Cities along the coast were centers for trade for their hinterland, and gateways through which immigrants passed. They were also cultural centers and dominated the back country culturally and socially. The influence of these cities in the development of speech areas is second only to the influence of the original settlement.[10]

Until 1720, the population of the Atlantic Seaboard was almost entirely of English stock. Along the coast of the Gulf of Mexico and in the Southwest there were the French and Spanish. Nor can the Negro slaves of the South be ignored in a description of dialects.

The year 1720 marked the beginning of an influx of non-English speaking immigrants. Since that time until the present day people from various countries have continued to come. Each nationality has left its mark on American English speech.

Because social classes are less clearly defined in America than in Europe, there are no clearly defined social dialects as there are in Europe. What is found is a gradation from cultivated speech (that of college graduates and professional people) through common speech (that of those whose education is limited to high school and perhaps a local trade school) to folk speech (that of people having very little or no formal education). Cultivated speech is widespread in urbanized areas; folk speech, in secluded areas such as northern New England

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[10] Ibid., pp. 1-5.

and the Appalachians; common speech, in the greater part of farming areas.

Cultivated speech tends to become regional or even national. On the other hand, folk speech tends to remain local. Common speech occupies a place in between the other two, both socially and geographically. Thus, if one wishes to know the original speech of a region, he is more likely to find it in the folk speech than in the cultivated speech.[11]

Standard language arises simply as a local dialect that becomes elevated because of social prestige. In England the language of London became standard simply because London was a center for important affairs of English life. Writers began to feel the necessity of using London English rather than a dialect which may have been far more natural to them. As London English gained social prestige, the ability to use it connoted relation with the center of affairs in English life. Inability to use such English indicated lack of important social contact.[12]

Similarly, there were certain cities in the United States which gained prestige and eminence because of their location on a busy harbor, or because of an existing university or some thriving business which brought them into contact with many people. These cities became the hubs around which the social and cultural aspects of American life revolved. It was natural therefore--in fact it became the fashionable thing to do--for the people to imitate the speech of the influential and educated class of these cities. Thus the so-called prestige dialect was gradually copied by the people of the surrounding region who wished to be looked upon as the cultured group.

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[11] Ibid., pp. 7-9.

[12] Charles C. Fries, "Standard English," Aspects of American English, ed. Elizabeth M. Kerr and Ralph M. Aderman (New York: Harcourt, Brace, and World, Inc., 1963), pp. 180-181.

What then is Standard English? It is not a matter of legal authority, nor is it a matter of comprehensibility.[13] In fact, some so-called incorrect forms may be more easily understood by some speakers than the correct counterpart. Whether a form is accepted or rejected does not depend upon its merit nor on official approval but on whether the hearer will react favorably or unfavorably.[14]

This does not mean to imply that any form is acceptable--that is, that children should never be encouraged to substitute I did it for I done it. It does mean that correctness is a relative matter. Social custom accepts some language forms just as it does some table manners. There are occasions in which cultured persons would rather avoid eating chicken than to eat it with their fingers. Likewise, there are some situations in which folk speech is equally unacceptable. On the other hand, teachers sometimes give undue emphasis to drill on such forms as _It is I_ when _It's me_ is universally used, if not universally accepted.

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[13] Cardinal Richelieu in 1635 inaugurated the Academie francaise which was made official by the French government. A French dictionary was published by this group. To this day the Academie francaise sets the standard for the French language. French speaking people, however, do not adhere to this standard and readily admit their failure to do so.

[14] Robert A. Hall, Jr., "Right vs. Wrong," Aspects of American English, ed. Elizabeth M. Kerr and Ralph M. Aderman (New York: Harcourt, Brace and World, Inc., 1963), pp. 219-228.

In the introduction to _Webster's New World Dictionary of the American Language_, Harold Whiteall points out that every effort to establish a standard American English has failed. In American life one may speak Southern, Middle Atlantic, Chicago-Great Lakes, or Eastern New England English without any disadvantage. The important thing is to speak in a forceful, clear, and literate fashion the variety of English of one's environment.[15]

CLASSROOM PROBLEMS RELATED TO DIALECTS

In accepting McDavid's definition that dialectology is the study of language differences within a speech community, the teacher is confronted immediately with some of the major questions which Dr. McDavid proposed in a speech to the NCTE Convention in November, 1964, when he asked, "To what extent do dialectal differences complicate the teaching of reading?"[16] In a discussion of this question, McDavid says: "A reading program . . . is likely to be effective in proportion to its use of the language habits that the student has acquired in speaking."[17]

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[15] Joseph H. Friend and David B. Guralnik (eds.), _Webster's New World Dictionary of the American Language_ (Cleveland: The World Publishing Company, 1960), pp. xvi-xvii.

[16] Raven I. McDavid, Jr., "Dialectology and the Teaching of Reading," _The Reading Teacher_, XVIII (December, 1964), 206-213.

Truly, the speech patterns which the first grade child brings to the classroom are acquired ones. From the first birth wail until the last breath of life, an individual continues to acquire speech habits, adjusting them consciously or unconsciously to his need or his environmental changes.

At the time of his birth, a child becomes a member of a socio-economic class wherein all aspects of his environment affect his language. The neighborhood in which he lives, the occupation of his father, the cultural level of his family and associates, the recreational interests of his community all affect the pre-school language patterns.

> The beginning of his social life with man is the beginning of language for the baby. . . . The child's world of language is rich and various in all linguistic elements . . . he is passing through phases of imitation and creation. . . . In his own time the child will discover and make his own the language and way of life suitable for him--if we do not interfere in unwitting, harmful ways.[18]

The learning process is quite advanced when the child enters school. By this time, he is using basic sentence patterns, with proper intonation and word-order. He has mastered much functional grammar and a vocabulary of more than five thousand words. If he has a literate background, it is likely that he will use many descriptive words and speak in complex sentences. Example: The following story was told by a young boy entering kindergarten (both parents college graduates).

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[17] _Ibid_., p. 207.

[18] Carl A. Lefevre, _Linguistics and the Teaching of Reading_ (New York: McGraw-Hill Book Company, 1964), p. 32.

> Well, this little doorbell had a door, and somebody lived there. And the house caught on fire. Somebody saw it and called the fire department, and the fire department put it out.
>
> The stove caught on fire. There was something wrong with the wire going up to the roof.

"A child's language is an intensely personal possession"[19]--as such, it should be respected by the teacher. If the natural speech of the first-grader can be accepted to the extent that he is encouraged to continue its uninhibited flow until the awesomeness of first days of school has worn off, unfamiliar faces have become recognizable as trusted friends, and the strangeness of the new world has become routine and accepted, then the teacher with sympathy, patience, and understanding may lead the child to function in a way that will be socially acceptable and self-satisfying. "Language is a powerful social bond, integral with personality and culture,"[20] and without this language, an individual is unable to function in human society.[21]

The fluency of a child's speech will be determined largely by such factors as his opportunity to hear and to practice correct speech patterns from the time he begins to create the rhythmic and melodic utterances of infancy, and, at approximately one year, to imitation of words and phrases uttered by his parents and his peers, his language patterns are forming, and into these patterns come many confusions of English phonemes. It is likely that he will say (wuv) /wəv/ for *love*, and (froo) /fruw/ for *threw*. In time, however, many of these problems disappear, if the child hears correct pronunciation and if adults do not imitate his baby-talk and intensify the incorrect training by letting him hear these incorrect sounds.

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[19] Ibid., p. 43.

[20] Ibid.

[21] Raven I. McDavid, Jr., "The Cultural Matrix of American English," Elementary English, XLII (January, 1965), 15.

Not only will there be a great divergence in the quantity of intelligible utterances first-grade children will make and the concepts they will have, but perhaps a greater problem will be the divergent patterns of speech that will be heard in the classroom. This problem may be complicated by the presence of many dialects if the school is located in a section where foreign-born, underprivileged, bi-lingual, and the culturally elite may meet in the common confines of a public school classroom.

Differences in cultural backgrounds present major problems to the teacher as she plans a reading readiness program. Educated parents should be loquacious and permissive in allowing the child to talk freely about his many pre-school interests, should deliberately provide travel and books and music and opportunities for creative play and all broadening experiences possible. For children from such environments will come to school with the "built-in" readiness of a large vocabulary of meaningful words and many concepts upon which new concepts may be built.

Contrasted with this situation is the child from the home where poverty and ignorance have stolen his birthright, where never a song has been sung, never a story has been read aloud, never has a colorful magazine or a picture book been thumbed through, where no letters are written or received, no arts or crafts utilized, where clothes are a cover for nakedness, and a meal something to stave off hunger. Circumstances beyond his control have robbed this child of knowledge and of a sense of well-being and security. His meager experiences in life have kept him narrow in soul and spirit.

Brooks, Supervising Director of the Department of English in the public schools of Washington, D.C., in an address at the NCTE Convention in November, 1963, brings to the attention of her listeners two distinct problem groups which may well exist in the same classroom of any American school. These two groups are the culturally different and the culturally deprived. She speaks of these as users of non-standard English.

The culturally different group would likely include children of superior intellect with rich cultural heritages, but who differ in manner, dress, and speech from the average, middle-class, socially acceptable majority of the class (example: Cuban refugee families). Because the child is shy and non-talkative due to his speech deficiencies, he is lumped with slow learners.

The culturally deprived child may be the little Negro girl who moved with her family from the rural southeastern section into the slum area of a large city. Feeling inferior in dress, inadequate in language, rejected in social contacts, this child becomes withdrawn, non-communicative, and unhappy.[22]

From opposite sides of the tracks in the same community, into September's class, come these beginning pupils with divergent speech patterns as far apart as their social status. Within the class there may be the migrant worker's child from California, the child of the minister recently arrived from Ohio, the junior executive's son whose family has just transferred from southern Georgia, and, in all probability, sons and daughters of military personnel from the four corners of the earth, some with foreign born mothers, or who are themselves adopted children of Oriental or European parentage and whose fathers rank from PFC to Lieutenant Colonel.

A study of dialects would be of great value to a classroom teacher. Because of the shifting population of America, local idioms may be unintelligible to persons from other areas. Thus, an understanding of dialects and their major forms is an important part of every teacher's training. A familiarity with dialects will enable the teacher to realize that local dialects are sufficient to express the ideas of the users.

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[22] Charlotte Brooks, "Some Approaches to Teaching Standard English as a Second Language," Elementary English XLI (November, 1964), 728-733.

IMPLICATIONS FOR THE TEACHER

The teacher can successfully introduce variant detailed vocabularies and pronunciations to the student without implying that the student's dialect is wrong. By arousing the child's interest in the peculiarities of the speech of others, the teacher is preparing him for the time he will meet and communicate with people beyond the bounds of his own community. At the same time, the student is permitted to use his own dialect when it is suitable. If the local dialect is obviously insufficient for classroom purposes, the teacher is justified in encouraging substitution of new words for the local idiom, but the change should be made with tact.[23]

First, the linguist assures the teacher that the word dialect is a descriptive word and not a derogative term, that there is no dialectal region that is prestigious and, therefore, there is no preferable dialect.

Acceptance of this statement will relieve the conscience of the teacher who, bound by tradition, has felt that only standard English should be tolerated in the classroom. Under this philosophy of permissiveness in speech, the teacher encourages natural expression. In turn, the child relaxes and speaks spontaneously in his natural utterances.

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[23] Nebraska Curriculum Development Center, A Curriculum for English: Language Exploration for Elementary Grades (Lincoln: University of Nebraska, 1965), p. 137.

The linguist says to the teacher, "We should not reject the first language of any child; we must leave his language alone as though it were a foreign tongue."[24] If this first language is accepted by teachers and classmates, the speech will flow freely, and it is assumed that the child will learn the acceptable language and shift naturally into standard English when such a shift becomes natural for him.

If there is a noticeable divergence among children of different cultures, whether the difference is in physical appearance or behavior, it is the responsibility of the school to break down such barriers so that each child will feel accepted by the dominant groups. Until the child feels secure and accepted, he will not venture to display some of his own skills. Until he feels accepted, his efforts to avoid appearing different will be repelled. He may feel rejected and become sensitive to the inefficiency of his communication, and become a non-social individual.

Teachers, therefore, will agree with many of the philosophies of modern-day linguists and educators who are attempting to relate the principles of linguistics to reading instruction.

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[24] Brooks, op. cit., p. 733.

They will teach that a dialect does not have to be accepted nationally in order to be a standard dialect and that other forms, with which she may not be familiar, are equally acceptable in another dialectal region and that to find an entry labeled dial does not consign the word to a poverty pocket in America.

Van Riper of Louisiana State University, speaking to the participants in the institute at the University of Mississippi in the summer of 1965, gave numerous illustrations of acceptable words which differ widely from one area to another. Some interesting variations were: skillet, spider, frying pan; teeter-totter, see-saw; hot cakes, griddle cakes, pancakes; tote, carry.

Where regional differences and social differences occur in the same classroom so that the same gross phonetics may signal different meanings, weather, (wĕth′ẽr), /weðər/, whether, (wĕth′ẽr), /weðər/, or different gross phonetics may signal the same meanings, creek, (krēk), /kriyk/ or (crĭk), /krik/, the teacher will be alert to the difference and make suitable explanations to the pupils.

> It is the linguist, again, who can help teachers gain competence in developing newer kinds of language study. Even in elementary school classrooms attention could be given to the history of American English, to the factors that have affected its development, to the histories of individual words, and to the ways in which pronunciation and meanings of words have changed over time. For too long, it seems, the most interesting aspects of language study have been unknown to teachers, and therefore unavailable to children. Linguists have the ability

> and the opportunity to bring this study into focus now.[25]

It should be the aim of the teacher to accept the child's speech patterns, to encourage him to speak as fluently as possible, and gradually, by precept and example, to lead the child toward a pattern of speech that is acceptable in his locality. She should point out to the child the advantages of learning to speak acceptably. The teacher should not allow herself to become frustrated in her efforts to bring about this change, realizing that the child's speech outside the classroom is re-enforced by his home environment. On the other hand, she will create material directed toward the needs of her special speech problems.

APPLICATIONS RELATED TO DIALECTS

First Exercise

This exercise is to be used in areas where there are many regional dialects in the classroom (schools near military bases, cosmopolitan areas, etc.).

This would be an excellent activity for the first days of a new term. It could be used in the intermediate grades, to introduce the pupils to one another, to review locations, etc.

On a large wall map of the world, locate the home town

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[25] Dolores Durkin, "Linguistics and the Teaching of Reading," The Reading Teacher, XVI (March, 1963), 345-346.

(or native country) of each pupil. Indicate each location with the child's name on a colored marker. Let each child talk about his section. Listen for some dialectal differences that are peculiar to the area of the school. When the child has finished, say, "Do you know one way we might have known that you came from another section of America, even if you had not told us?"

Some children may suggest that we would know by hearing him talk.

"What did Johnny say that sounded different?" (Let children discuss some differences.) Then say, "But did you know that everybody in __________ says that word just as Johnny says it? The way people talk in a certain part of the country is called their dialect. Usually, the dialects of Americans can be grouped under the areas, like this."

Begin construction of a dialectal chart, similar to Chart VI. As children suggest differences, keep this as a continuous chart throughout the year as other differences are discovered.

Then say, "There is another dialectal difference, other than pronunciation, that is found in many regions. This is a difference in words. Mary, what do you call the little cakes we may have for breakfast? We eat them with syrup and usually serve bacon or sausage with them." Mary might say, "Hot cakes." "Johnny, what to you call them? Joe, what do you call them?" As children give various names, begin construction of a chart similar to Chart VII.

CHART VI

VARIATIONS IN PRONUNCIATION

Regular Spelling	East New England		Southern		Mid-Western	
	Dict. Pron.	Phone. Trans.	Dict. Pron.	Phone. Trans.	Dict. Pron.	Phone. Trans.
farm	(fäm)	/fahm/	(fäm)	/fahm/	(färm)	/farm/
after	(ăf́tẽ)	/áeftə/	(ăf́tẽ)	/aéftə/	(ăf́tẽr)	/aéf-tər/
path	(päth)	/paθ/	(păth)	/paeθ/	(păth)	/paeθ/
orange	(äŕənj)	/árənǰ/	(äŕənj)	/aŕənǰ/	(ôŕənj)	/ɔrənǰ/
horror	(häŕẽ)	/hárə/	(häŕẽ)	/hárə/	(hôŕẽr)	/hɔŕər/
college	(kawĺij)	/kɔĺɨǰ/	(kŏĺij)	/kálɨǰ/	(kŏĺij)	/kálɨǰ/
rock	(rawk)	/rɔk/	(rŏk)	/rak/	(rŏk)	/rak/
tired	(tī́-ẽd)	/tayad/	(tärd)	/tahrd/	(tīrd)	/tayrd/
cow	(kău)	/kaew/	(kău)	/kaew/	(kou)	/kaw/
news	(no͞oz)	/nuwz/	(nūz)	/nyuwz/	(no͞oz)	/nuwz/
tune	(to͞on)	/tuwn/	(tūn)	/tyuwn/	(to͞on)	/tuwn/
pen	(pĕn)	/pen/	(pĭn)	/pin/	(pĕn)	/pen/
greasy	(grḗ-zĭ)	/griyzɨ/	(grḗ-zĭ)	/griyzɨ/	(grḗ-sĭ)	/griysɨ/

CHART VII

VARIATIONS IN TERMINOLOGY

North	Midland	South
pail	bucket	bucket slop bucket
burlap bag burlap sack	gunny sack	croker sack crocus sack
wish bone lucky bone	wish bone	pully bone pull bone
fritter, pancake	flannel cake hot cake, pancake	batter cake
screech owl	screech owl	scrich owl scrooch owl shivering owl
spider	skillet	frying pan

Note: The above geographical divisions apply to areas on the east coast of the United States. The northern area extends from northern New England to central Pennsylvania; the midland area extends from central Pennsylvania to South Carolina in the area which lies west of the Blue Ridge Mountains. Dialect variations are still most pronounced along the east coast but the major linguistic areas outlined above have fanned out in a westward direction, so that many of the dialect differences found in the major east coast areas will also be found in the respective northern, central, and southern states as far west as the Rocky Mountains. The term "General American" is often used to denote the common speech of the mid-western and western states.[26]

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[26] Nebraska Curriculum Development Center, op. cit., pp. 138-139.

Second Exercise

Pupils may enjoy finding stories and reading them orally. Following oral reading they may translate the passage into the dialect of the region in which they live. (The teacher should make pupils realize that all speech is some dialect.) Pupils may be encouraged to find out the time and geographical setting of the story. The dialect may then be related to the history of the region. If the dialect has been influenced by another nationality group the reason for the dialectal differences may be explained in terms of the difference in the native language and English.

Third Exercise

Perhaps an upper elementary class could be led to develop a language unit using the scientific method of the linguist, viz., investigation to discover the variety of speech patterns used in their own community. Undoubtedly, some of the same discoveries will be made that a linguist might find: there will be the folk speech of those who have little or no formal education and the more refined speech of college graduates, especially those in the professions.

Preceding the setting up of the investigating teams, readings and observations of infants learning to speak could be used as a means of helping children to discover how language developed. They will want to find out:

1. How the cave man talked.

2. How written language developed.
3. How modern means of communication ended.
4. What a linguist is.

Linguistic teams could be set up within the classroom for the purpose of investigating and recording common speech patterns. Perhaps they may be looking for particular forms of speech, such as the use of _I seen_, _he don't_, _we'uns_, and _you'uns_, and others peculiar to the region. A definite form for recording these should be planned. The pupils will no doubt want to discover the speech patterns of:

1. Their schoolmates
2. Adult friends
3. Teachers and other professional people with whom they have contact
4. People of other regions, if possible
5. Manual laborers
6. White collar workers.

As reports are brought in, speech patterns will be examined in the light of the history of the region and the etymology of the word. At the same time, the speech of the _less educated_ will be contrasted with that of the _more cultured_.

Questions for which answers are sought are:

1. Why do speech patterns vary?
2. Why is one form of speech preferred to another?
3. What speech is desirable for us?

As this unit progresses, recordings in dialect may be used for illustrative purposes. Tape recordings of the pupils' spedch may also be made. Folk songs can be sung and stories written in dialect enjoyed, as has been mentioned previously.

Some modern workbooks include exercises dealing with colloquial and dialectal usage. One such book is the set of workbooks accompanying the J. B. Lippincott Basic Reading Series.

Fourth Exercise

Teachers who have a knowledge of American English dialects will find many ways in which these dialects can be used for enrichment purposes. For example--when studying the history and geography of the New England States--what better way would there be to make dry historical dates and geographical locations come alive than to read some stories having a dialectal flavor such as "Thar She Blows," a whaling story in which the author, Paul Johnston, has preserved the old New England dialect. Two more fascinating seacoast tales are "Block Island Wreckers"--an old yarn told to Joseph Mitchell by a sea captain and his crew--and the daring adventures of "Old Stormalong"--the New England version of Superman.

Moving down along the Gulf Coast and up the Mississippi River, the teacher will find innumerable samples of literature that portray the varying dialects of the South. Which student would not enjoy the delightful Uncle Remus stories and the immortal books of Mark Twain?

While studying pioneer days and the exploration of the Middle West, no social studies course would be complete without an account of the exploits of such heroes as Paul Bunyan, Davy

Crockett, Mike Fink, Pecos Bill, Johnny Appleseed, and Daniel Boone--all excellent samples of the inimitable dialect of the hardy pioneers.

Then there are the immortal characters of the West--Buffalo Bill, Wild Bill Hickock, Billy the Kid--and the great stories of O'Henry and Bret Harte. These are but a few samples of American literature in which the various dialects of the country play such a vital part.

Over and above the role of dialect in literature, history, and geography, there still remains another area which the classroom teacher cannot afford to neglect--viz. that of music. Just a superficial review of the field reveals such songs as those of Stephen Foster--filled with dialect--the almost countless cowboy songs, and the poignant words and melodies of the Negro spirituals.

Finally, the cultural medium of art could be used as a culminating activity to the above units of study. Many more facts of history, geography, and literature would be retained if these were made the subject of the students' art classes.

Truly, the creative teacher will find no difficulty in locating a wealth of material for enrichment in the treasure of our dialects.

Fifth Exercise

This suggestion is for use with upper elementary and junior high students.

In addition to the usual dictionary skills taught in the past (locating words in the dictionary, choosing one of several meanings to fit a particular context, using diacritical markings and key words as a guide to pronunciation) it is recommended that the following also be taught:

1. Use of the preface and introductory notes to discover, if possible, the editor's source of authority for his entries, the reason for the choice of entries, which pronunciation, if any, is preferable, meanings of symbols, and other information regarding the general make-up of the book.

2. The importance of the date of publication.

3. The meaning of etymology, its usefulness, and the use of the dictionary as a source of such information.

4. Use of out-of-date dictionaries to note language changes.

5. The value of cross-references before reaching a final decision regarding dictionary entries.

It cannot be emphasized too strongly that no legal authority is vested in any dictionary. Editors themselves do not make this claim. Entries are not final, nor is every acceptable pronunciation and meaning necessarily listed. Choices of entries rest entirely with the editors.

The preface and introductory notes (too often neglected by both teachers and pupils) will clarify some mistaken ideas regarding the intent of the editors. Many people think the first pronunciation listed is preferable to the others. Several dictionaries were checked. In no case did the editors indicate a preference for one pronunciation entry above another.

Dictionaries recommended for the use of pupils and teachers:

Merriam-Webster's Third New International Dictionary (entries are complete and related to contemporary American life).

The New English Pronouncing Dictionary, commonly known as The Oxford Dictionary (a valuable source of information relating to language changes. Origin of words is traced back to Old English).

CONCLUSION

In conclusion the following may be emphasized:

1. Linguistic science is not new. Scientific studies of language began in Europe during the early nineteenth century. Linguists have accumulated and recorded a vast amount of knowledge related to language. Worthy of note to teachers are two facts:

   (a) All language is spoken in some dialectal form. Standard language is a prestige dialect.

   (b) Language always has been and continues to be in a constant state of change. Language which is accepted in circles of the educated during one generation may be completely unacceptable to the next. (Example: Ax, along with ox and oxi, was the acceptable pronunciation of ask during the Middle English Period, 1200-1600.)

2. Teachers would do well to acquaint themselves with the work of dialectologists in this country.

3. Teachers should be continually aware that the spoken language is basic for developing all language art skills. The child who does not talk is not likely to read. It behooves the teacher, therefore, to see to it that the child feels comfortable with the language he brings to school lest he cease to talk because he thinks that what he has to say and the way in which he says it is unacceptable.

4. Dialects may create some pedagogical problems. They can also be a source of enrichment in many areas of learning.
A few suggestions of ways in which dialects may be related to a language arts program have been made. It is hoped the teacher will regard these suggestions merely as such, and she will devise means of developing language understandings and appreciations to fit the particular situation of her classroom.

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